

PSYCHIATRIC TREATMENT NUMBER

*the*

# Journal

*of the association for physical  
and mental rehabilitation*



SEPTEMBER - OCTOBER, 1954

Vol. 8, No. 5

## Handicapped Drivers!

### DRIVE YOUR CAR

—SAFELY

—EASILY

with new

Mechanical

GAS & BRAKE

**HAND**

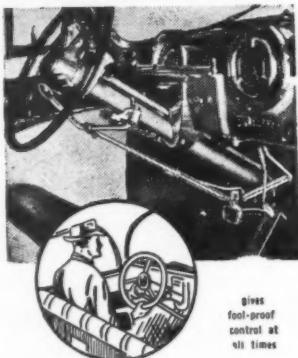
CONTROLS

\$39.50

Plus Postage  
with copy  
of this ad  
KITS CAN BE  
INSTALLED  
IN 2 HOURS

Here's the greatest development in handicapped driver controls. One lever does both operations—works both brake and gas—makes your car absolutely fool-proof. The slightest touch of your fingers now operates your car! Thirty years' experience in building automatic clutch and brake controls have gone into this new development.

CALL or WRITE for FREE PAMPHLET  
—be convinced!



GIVES  
fool-proof  
control at  
all times

**BRAKES INC.**

Long Island's largest  
brake specialists

3716 QUEENS BLVD.  
LONG ISLAND CITY  
NEW YORK  
STILLWELL 4-6417

## Doorway Gym Bar



SECTIONAL VIEW OF THE DOORWAY GYM BAR

Instantly installed in doorway by expansion. No nails or screws. Exercises included. Very highly recommended by physical educators.

Write for particulars to

**OLYMPIAN INDUSTRIES**

4720 N. Kilpatrick Ave., Chicago 30, Ill.

### 10th Anniversary

### "NATIONAL EMPLOY THE PHYSICALLY HANDICAPPED WEEK"

October 3-9, 1954

### HIRE THE HANDICAPPED



**PRESTON**

*A Complete Line*

## FOR PHYSICAL MEDICINE AND REHABILITATION

**REHABILITATION:** Progressive Resistance Exercise Units; Quadriceps-Gastrocnemius-Footdrop Boots; Pulley Weights; Doorway Pulley Assemblies; various types of Bicycle Exercisers; Restorator; Kanavel Table; Manuflex and Grip Restorer for hand therapy; Ankle Exercisers; Shoulder Wheels with or without height adjustment; Stall Bars; Walking Parallel Bars and Exercise Staircases of various designs; Invalid Walkers; Posture Training Mirrors, single and triple; Sayre's Headslings and scales to measure amount of traction; Foldaway Jim, a gymnasium for the office or patient's home; Gymnasium Mats in various sizes, thicknesses and coverings; Crutches and Canes; Patient Lifter; Standing Tables and Beds; Self-help DeVises Cerebral Palsy Furniture; Speech Therapy Equipment.

**DIAGNOSTIC APPARATUS:** Chronaximeters; Dynamometers; Goniometers; Oscillometers; Thermo-couples and Skin Thermometers.

ALL your needs supplied  
by ONE reliable source

**HYDROTHERAPY-ELECTROTHERAPY:** Whirlpools for every use; Whirlpool Carriage; Hubbard Tanks; Paraffin Baths; Hydrocollator Master Units and Steam Packs; Shortwave Diathermy; Galvanic-faradic-sinusoidal Generators; Hanovia Ultraviolet Lamps; Heat Lamps and Bakers; Ultrasonic Generators; Treatment Tables; Timers.

### New Items of Interest

Guthrie Smith Universal Sling Suspension Apparatus, Standard and Portable Models; complete with all springs, ropes, pulleys, slings, etc.

\$295.00

Standing Table, Manually operated; movable footrest; Tilts up to 70. Supplied with safety belts .....

\$190.00

WRITE FOR YOUR FREE COPY OF  
ILLUSTRATED CATALOG NO. 1054  
INQUIRIES INVITED

**J. A. PRESTON CORP.**

175 FIFTH AVENUE, NEW YORK 10, N. Y.

SEPT. - OCT. 1954

Volume 8

Number 5

Published Bimonthly  
by the Association for  
Physical and Mental Rehabilitation  
1472 Broadway  
New York 36, N. Y.  
Tel. BRyant 9-9642

**EDITORIAL BOARD**

Arthur Abramson, M.D.	Bronx, N. Y.
Frederick J. Balsam, M.D.	Washington, D. C.
Thomas F. Barrett, M.D.	Chicago, Ill.
John E. Davis, Sc.D.	Washington, D. C.
Edward D. Greenwood, M.D.	Topeka, Kans.
Jack Meislin, M.D.	Montrose, N. Y.
Arpad Pauncz, M.D.	Downey, Ill.
Carl Haven Young, Ed.D.	Los Angeles, Calif.

**EDITORIAL STAFF**

**EDITOR**

Roger H. Wessel  
Box 178, Montrose, N. Y.

**EDITOR EMERITUS**

Everett M. Sanders  
So. Sudbury, Mass.

**ASSOCIATE EDITORS**

Marthann Doolittle  
Thomas J. Fleming  
J. Robert Macaluso

**CONTRIBUTING EDITORS**

Ernst Jokl, M.D., Lexington, Ky.  
Peter V. Karpovich, M.D., Springfield, Mass.  
C. H. McCloy, Ph.D., Iowa City, Iowa  
Marcus Stewart, M.D., Memphis, Tenn.  
Dana M. Street, M.D., Memphis, Tenn.  
Raymond A. Weiss, Ph.D., New York, N. Y.

**DEPARTMENT EDITORS**

**BOOK REVIEWS AND ABSTRACTS**

Philip J. Rasch

**CHAPTERS**

Sam Boruchov

**PRODUCTION EDITORS**

Julius Levin      Harold McCormick  
                    Lawrence O'Melia

**CIRCULATION MANAGERS**

Edward Mecchella      William Kultzow

**ADVERTISING MANAGER**

David Bilowitz  
216 Julius St., Iselin, N. J.

**SUBSCRIPTION RATES**

Subscription to the Journal is included in Active, Professional, and Associate memberships.

Subscriptions to libraries and organizations \$5.00

Foreign \$5.50

Single Copies \$1.00

Address all requests for subscriptions to:  
Edward F. Mecchella, Circulation Manager,  
Box 178, Montrose, N. Y.

Copyright 1954 by the Association for Physical  
and Mental Rehabilitation

**in  
this  
issue**

**ARTICLES**

Limitations of Contemporary Psychiatric  
Procedures for The Non-Verbal Regressed  
Psychotic—J. Arthur Waites, Ph. D. .... 143

Weight Training In A Neuropsychiatric  
Hospital—Philip J. Rasch, M.A.  
and Richard V. Freeman, M.D. .... 146

Group Dynamics As A Therapeutic Agent  
In Rehabilitation—William W. Young, M.D.  
and Ralph Simon, Ph.D. .... 151

Development of Evaluative Methods for  
Assessing Effectiveness of Corrective  
Therapy In The Treatment of The Psychiatric  
Patient—H. S. Curtis, Ph.D. .... 153

Therapist or Media?—Effectiveness of Each  
In Psychiatric Rehabilitation—  
Daniel Dancik, M.D. .... 155

Criteria for Social Adjustment of Individuals  
Who Have Been Hospitalized Because of  
Mental Illness—Emily R. Scanlan .... 158

A New Functional Dynamic Wrist Extension-  
Finger Flexion Hand Splint—  
John G. Bisgrove, M.D. .... 162

A Shower Chair for Disabled Patients—  
William A. Clark and I. B. Hopson, Sr. .... 164

**DEPARTMENTS**

WE INTRODUCE ..... 165

FROM OTHER JOURNALS ..... 166

EDITORIALS ..... 167

RESEARCH ..... 168

BOOK REVIEWS ..... 170

CHAPTER ACTIVITIES ..... 172

NEWS AND COMMENTS ..... 172

CLASSIFIED DIRECTORY ..... 177

# THE JOURNAL OF THE ASSOCIATION FOR PHYSICAL AND MENTAL REHABILITATION

## Information For Contributors

**MANUSCRIPT:** Manuscripts should not exceed ten (10) typewritten pages; approximately 5,000 words. Manuscripts must be the original copy, not a carbon, typed double-spaced with margins of one (1) inch for large type and one and a half (1½) inches for the small.

**STYLE:** Prepare manuscripts in conformity with the general style of the Journal. Retain a copy of the manuscript and duplicates of all tables, figures, charts for future use should originals be lost in the mails.

**ILLUSTRATIONS:** Drawings and charts should be made with India ink for photographic reproduction as zinc etchings. Photographs must be 8 x 10 inches, high contrast, black and white, glossy prints. Printed captions and related information referring to photographs, must be typed and attached to the bottom of the photograph. All illustrations should not exceed 8 x 10 inches and are more acceptable when a smaller size does not sacrifice important detail. Redrawing and preparing illustrations, to make them suitable for photographic reproduction, will be charged to the contributor.

**REFERENCES:** References in the text, should be in the form of footnotes, numbered consecutively throughout the manuscript. Additional references for collateral reading should be assembled alphabetically by author at the end of the article. Cumulative Index Medicus. This requires in order name of author, title of article, name of periodical or book, volume, page, month and year. For example: MORTON DUDLEY J., *The Human Foot*, Columbia University Press, 1953. KRAUS HANS, M.D., *Therapeutic Exercises in Rehabilitation*, Journal of Physical and Mental Rehabilitation, Vol. 3, pp. 7-10, June, 1959.

Send all manuscripts to the Editor, Box 178, Montrose, N. Y.

**REPRINTS:** Should be ordered when manuscript is submitted. They may be purchased at the following prices:

No. Pages	100	200	300	400	500	1000	100 Add.
1	\$ 6.50	\$ 7.75	\$ 8.75	\$ 9.75	\$10.75	\$15.00	\$ .75
2	9.25	10.50	11.75	13.00	14.25	19.75	1.00
3 - 4	11.75	13.50	15.25	17.00	18.50	26.00	1.50
5 - 8	22.50	25.75	29.00	32.25	35.50	48.75	3.00
9 - 10	25.50	30.50	35.50	40.50	45.50	65.00	4.00

An extra charge will be made for reprints ordered after manuscript has been published. Quotations will be furnished on request. Address inquiry to the Editor.

## Subscriptions

**SUBSCRIPTION RATES:** Annual subscription rate is \$5.00, payable in advance. Association membership rates are: Active, \$10.00; Professional, \$5.00, and Associate, \$4.00. **SINGLE COPIES:** Single copy price is \$1.00.

**REMITTANCES:** All remittances should be made by check, money order, or draft. Never send cash except by registered letter. Make checks, money orders or drafts payable to the "Association for Physical and Mental Rehabilitation."

All requests for change of address or membership should be addressed to—**STANLEY H. WERTZ, SECRETARY, 1433 RAILTON ROAD, MEMPHIS, TENNESSEE.**

## Advertisers

**ADVERTISING RATES:** Full page \$75.00—½ page \$40.00—¼ page \$25.00—½ page \$14.00.

Classified Directory listing for one year (6 issues)—\$10.00.

**ADVERTISING MANAGER:** David Bilowit, 216 Julius St., Iselin, N. J.

## OFFICERS

LOUIS F. MANTOVANO	PRESIDENT
37 Clinton Ave., Rockville Centre, L. I., N. Y.	
FRANK S. DEYOE	PRESIDENT-ELECT
87 Elm St., Saxonville, Mass.	
ARTHUR LANDY	VICE PRESIDENT
335 Church St., Chillicothe, Ohio	
EDWARD D. FRIEDMAN	VICE PRESIDENT
1914 William St., Union, N. J.	
CHARLES WILLHITE	VICE PRESIDENT
4732 Canehill, Lakewood, Calif.	
STANLEY H. WERTZ	SECRETARY
1433 Railton Road, Memphis, Tenn.	
ELEANOR B. STONE	TREASURER
2451 Webb Ave., University Hts. 68, N. Y.	
ROGER H. WESSEL	DIRECTOR OF PUBLICATIONS
Box 178, Montrose, N. Y.	
HAROLD M. ROBINSON	PAST PRESIDENT
1934 Apache Rd., Waukegan, Ill.	

## ADVISORY BOARD

HAROLD M. ROBINSON, Secretary

ARTHUR S. ABRAMSON, M.D.	Bronx, N. Y.
JOHN H. ALDES, M.D.	Los Angeles, Calif.
RUFUS ALLREDGE, M.D.	New Orleans, La.
DANIEL BLAIN, M.D.	Washington, D. C.
JOHN E. DAVIS, Sc.D.	Washington, D. C.
TEMPLE FAY, M.D.	Philadelphia, Pa.
EVERILL FOWLKES, M.D.	Portland, Ore.
RICHARD V. FREEMAN, M.D.	Los Angeles, Calif.
EDWARD GREENWOOD, M.D.	Topeka, Kans.
RICHARD L. HARRIS, M.D.	Montrose, N. Y.
HAROLD M. HILDRETH, Ph.D.	Arlington, Va.
A. B. C. KNUDSON, M.D.	Washington, D. C.
MELVIN J. MAAS, Maj. Gen. USMCR Ret.	Washington, D. C.
CHARLES A. MAXWELL, M.D.	West Orange, N. J.
ROSS T. MCINTYRE, M.D.	Coronado, Calif.
KARL MENNINGER, M.D.	Topeka, Kans.
DONALD MUNRO, M.D.	Boston, Mass.
LOUIS B. NEWMAN, M.D.	Chicago, Ill.
WINTHROP M. PHELPS, M.D.	Baltimore, Md.
JOSEPHINE L. RATHBONE, Ph.D.	New York, N. Y.
JACOB L. RUDD, M.D.	Boston, Mass.
LEE C. SEWALL, M.D.	Downey, Ill.
ARTHUR STEINDLER, M.D.	Iowa City, Iowa
HARVEY J. TOMPKINS, M.D.	Washington, D. C.
STAFFORD L. WARREN, M.D.	Los Angeles, Calif.

## COMMITTEES AND CHARMEN

**STANDING COMMITTEES:** Chairman and Coordinator: Edward D. Friedman; CHAPTERS: Sam Boruchov; CONFERENCE: Frank Deyoe; CONSTITUTION: David Holzapfel; MEMBERSHIP: Charles Willhite; NOMINATION: Peter Wrobleuski; NEWSLETTER: Hyman Wetstein; POSITION STANDARDS: Arthur Landy; PUBLIC RELATIONS: John F. Cullinan; PROFESSIONAL STANDARDS: Chris Kopf.

**ADMINISTRATIVE COMMITTEES:** Chairman and Coordinator: Arthur Landy; CERTIFICATION: Thomas J. Fleming; EXHIBIT: Donald Wright; LEGAL: Frank Ortega; LIAISON: Paul Beck; AWARDS: George Devins; CONFERENCE PROGRAM: Leo Berner; EDUCATION and PROFESSIONAL TRAINING: Karl K. Klein; SCHOLARSHIP AWARD PROGRAM: Arthur Tauber; HISTORIAN: Harlan Wood; PLACEMENT: William Zillmer; RESEARCH: Joseph Phillips; SURVEY: M. Raymond Robinson; VETERANS REHABILITATION LIAISON COMMITTEE: Unconfirmed; CIVILIAN REHABILITATION CENTERS: Dr. Joseph Rogoff; EMBLEMS: Frank Dignan; ADVERTISING: David Bilowit.

**AUXILIARY SERVICES:** NATIONAL PROSTHETIC CONSULTANT: Marshall Graham; AREA CONSULTANTS: On Call from National Headquarters.

# LIMITATIONS OF CONTEMPORARY PSYCHIATRIC PROCEDURES FOR THE NON-VERBAL REGRESSED PSYCHOTIC\*

J. ARTHUR WAITES, Ph.D.\*\*

The purpose of my paper is to place a background for the two papers which follow by Dr. Dreyfus and Mr. Marusak. They will discuss the psychodynamics of the regressed psychotic and the methods which corrective therapists have devised for the treatment of such patients.

The usual method of scholars in the preparation of papers is to turn first to the literary sources. There is an air of hesitancy and caution about people who prepare papers—a danger that one will say something that no one else has said. In my case, I quickly discovered that if I relied upon textbook source material for this paper I would be lucky if I could say anything that would last longer than five minutes. Psychiatric writing on the regressed psychotic is almost as infrequent and as inadequate as the literature on flying saucers—and probably for the same reasons, which center in ignorance and futility.

Some indication of the degree of disinterest in the regressed psychotic and the consequent paucity of scientific literature in this area may be gained from the fact that I checked a list of research projects undertaken mostly by clinical psychologists in the Veterans Administration during the year 1948.<sup>1</sup> Out of three hundred projects listed, not one dealt with any aspect of the chronic regressed psychotic. I do not believe that there is a published current list of ongoing research at this time, but if there were I doubt if it would show much difference in the direction of the research programs.

Malford Thewlis writes:

Human sympathy is universal in its scope, but not in its application. . . . From the purely esthetic standpoint, the aged are disagreeable—often repulsive—and fail to arouse sympathy as long as they are not completely helpless. They may justly be accused of perverseness, selfishness, wilfulness, suspicion, offensive actions, or disagreeable odors. One or several of these repulsive forces exists in almost every instance and overcomes sympathy and interest. One finds, consequently, that there is a universal tendency to shift the responsibility and care of the aged upon others. . . .<sup>2</sup>

Precisely the same statement could be made of our attitudes towards the regressed psychotic. Because of

their stubborn lack of response to our standard methods of psychiatric treatment coupled with their infantile behavior and stench, we have the “back wards” of our mental hospitals. Every NP hospital administrator can tell you of the difficulties in allocating staff to these wards. Every psychiatrist will tell you of the frustration and disillusionment that comes to the best of clinicians whose work lies with these patients.

There are, of course, many contributing factors to this situation. There is the lack of staff psychiatrists that plagues all our mental hospitals with the consequent piling up of effort and personnel in the area of the new patient where there is the greatest chance of recovery. There are, too—as Thewlis points out in respect to the geriatric patient—economic factors which make it unprofitable for psychiatrists to become expert in the field of the chronic patient.

But these factors are outcrops of a deeper problem—the treatment problem. Basically, psychiatry has concentrated on two widely different aspects of treatment for the mental patient. It is as if we had a long bipolar range with the somatic treatments on the one end and the psychotherapy techniques on the other end, with a long line of nothing much between them. The state of modern psychiatry is rather like the driver of a car who knows how to climb the heights of the Sierras and how to negotiate the plains of Kansas but cannot drive the twisting route from Florida to Maine. In other words, we are still limited in our knowledge and still largely unproficient in our techniques. And this is no crime. No man can speak Greek until he has learned it. The only crime is that if it is essential that he speak Greek, he still ignores and avoids learning it. Our crime is in concentrating exclusively on the psychiatric techniques which help the early psychotic.

Many authors have tried to outline—as Edward Strecker did so neatly in his little book<sup>3</sup> the relative effectiveness of the somatic treatments (insulin coma, electro-shock, electro-stimulation, vitamin therapy, etc.). However, all reach the same conclusion that as the schizophrenic degenerates into regressed chronicity the more impractical becomes the use of these

\*Excerpts from a paper delivered at Seventh Annual Convention of the A.P.M.R. in Washington, D. C., 1953.

\*\*Chief Clinical Psychologist, Veterans Administration Hospital, Perry Point, Md.

<sup>1</sup>Veterans Administration Information Bulletin 10-5-15.

<sup>2</sup>Malford W. Thewlis, *The Care of the Aged*, C. V. Mosby Co., St. Louis, 1946, pp. 22.

techniques. In the psychoses, the medical man battles against time and regression: if these get a good hold, the chances of success for his treatment methods fade into futility.

At the other end of the psychiatric bipolar treatment range are the psychotherapy techniques. The recent book by Frieda Fromm-Reichmann<sup>1</sup> describes very clearly the processes involved in treatment by psychoanalysis. Other authors provide equally lucid descriptions of other psychotherapeutic techniques such as brief psychotherapy, suggestive psychotherapy and non-directive psychotherapy. But throughout these texts one is always conscious of the vast importance placed upon the patient's willingness and ability to "verbalize." It is true that good psychotherapists are cognizant of the importance of non-verbal clues.

Fromm-Reichmann writes:

The non-verbal interplay experienced between patient and doctor which accompanies verbalized interchange also plays an integral part in all intensive psychotherapy.

You will notice, however, how this is phrased. It is: "which accompanies verbalized interchange."

In other words, I am attempting to make the claim that psychiatry's other group of therapies depend for the great part upon the willingness and ability of the patient to verbalize. The development of psychotherapy has not been in the direction of a mute doctor sitting with a mute patient. This is often done, but only in the initial effort to get verbalization sooner or later. As one psychiatrist once told me, "The analyst and his patient could still carry on without the use of eyes, limbs and not much of a body provided both can talk." It is true, also, that the talk itself doesn't mean too much in its own right: the main factors are enveloped in the intra-psychic functions. But the fact remains that verbalization is the major means of conducting the psychotherapeutic techniques . . . sooner or later someone has to talk.

This, then, reveals the inadequacy of classical psychotherapy with the non-verbal regressed psychotic.

Dr. Dreyfus will, undoubtedly, give us some psychodynamic reasons why the regressed psychotic may not talk. I am not going to concern myself with these at the moment. However, I would like to offer a theory for the non-verbalizing behavior of many of our patients which can be found in the early books of general psychology and which, I feel, has been overlooked by those who write and practice in the field of abnormal psychology.

Years ago, the early psychologists, such as John Galton, were interested in the basic, innate capacities of man. They found differences between people in respect to their ability to think in terms of visual imagery, auditory imagery and verbal imagery. There

were people who could recall a scene by seeing vivid mental pictures, while others could see no images in their mind's eye but vividly heard sounds. An experiment you may make is to take your family to a musical comedy and later ask them to recall their impressions of the theatre. Some will describe the scenes, the colors, the dresses, the sights that made up for them the enjoyment of the night. But others will be unable to describe the sets or the dresses. They, in turn, will recall the tunes, the dialogue, the quality of the music. The former were classified by the early psychologists as the visiles—the people who thought and emoted through sight. The latter were the audiles—getting and giving in life through sounds.

Eventually the list of human types extended to include tactiles (people who learn by touch) and motiles (those who learned by movement). But as the list grew, one factor remained constant: the people whose lives were governed by words and speech (the verbalizers) were always a small portion of the samples of population. Now why this should be so, we still don't know. It is true, though, of the child's development. First there is the pleasure that comes through sight; later comes the pleasure of locating sounds; later still the pleasure of touch and finally the pleasure of the first word and then the first sentence.

It seems to me, therefore, that the psychotherapy techniques could be regarded as 'unnatural' for some portion of the population, namely, those who are basically visiles or audiles or tactiles. This may be part of the explanation as to why analysts often find very great reluctance on the part of patients in the initial interviews to talk freely. Some psychoanalysts claim that the beginnings of the treatment sessions may be regarded as a learning period for the patient; a period in which he learns to emote through words. Could it be that these patients are not the verbalizers? It would be interesting to study this aspect of psychotherapy.

However, for the purposes of this present paper it is the non-verbality of the regressed psychotic which is our concern. Most of these patients do one of two things: either they become mute or they develop a kind of repetitive mumbo-jumbo. The problem we face in the treatment of this class of patient is one of motivation. And it is clear that, most regressed psychotics cannot be motivated through or by words. The psychotherapist has little success with this class of patients because the regressed psychotic has withdrawn to a level more infantile than the verbal. Sight, sound, touch and movement have now become

<sup>1</sup>Edward A. Strecker, *Fundamentals of Psychiatry*, Medical Publications LTD., London.

<sup>2</sup>Frieda Fromm-Reichmann, *Principles of Intensive Psychotherapy*, University of Chicago Press, 1950.

his major means of contact with the world. There is some evidence that the regressed psychotic not only relies on sight, sound, touch and movement in preference to verbal capacity but that these faculties have become hypersensitive. We have all seen the exaggerated reaction of the startled regressed psychotic to normal sounds and touch. The improved patient can often tell you of the terrors of heightened sensitivity during the period of his regression.

It is my present hypothesis, therefore, that the best means of approach in the treatment of the non-verbal regressed psychotic is through the remaining faculties of sight, sound, touch and movement. At our hospital, we have seen the effectiveness of the work of Mr. Marusak and his corrective therapists. We have seen regressed psychotics brought out of isolated withdrawal to primitive levels of group activity. And this has been achieved very largely through the medium of ball-playing. It is a slow and tedious process but, in many instances, it has been a successful process. To my mind, it has been successful because the corrective therapist has used the 'way-in' of touch and sight. He has gotten to the regressed psychotic at a level that is not normally in the bag of tools of the psychiatrist who relies so very much on verbal communication. Similar success with the regressed psychotic is noted at St. Elizabeth's Hospital here in Washington. A staff person who specializes in what may be called "dance-therapy" has had remarkably good results by guiding patients in expressive dancing. This technique has capitalized on the sensory function of movement. Though a patient cannot or will not express himself verbally, he can dance and move.

Is the non-verbal regressed psychotic fundamen-

ally not a verbalizer? Are these the people who have always been the tactiles or the visiles or the audiles or the motiles and have had to pay dearly for their verbal learning in society? These are questions that at the moment we cannot answer. But they make interesting research possibilities. We are not concerned here with the academic question as to whether these differences in the regressed psychotic are innate or are developmental. The fact is, that we notice these major differences in people—normal and psychotic. But if there were truth to this hypothesis, it would be possible for us to forecast ahead of time which patients were most likely to regress and in what direction. It would be possible to devise methods of treatment which capitalize on this knowledge of a man's basic aptitudes and capacities.

It seems to me that the psychiatrist is a very highly specialized person restricting his treatment methods to the somatic therapies on the one hand and the psychotherapeutic techniques on the other. Neither of these, however, are very successful with the non-verbal regressed psychotic. My thesis claims that there are means of communication with this class of patient but they are through the faculties of sight, sound, touch, and movement. The corrective therapist has shown that some success is possible with many of these patients through the medium of 'touch-therapy.' It is my hope that not only will they develop this method of treatment at the level of effective standardized procedures but that efforts will be made to explore the possibility of treatment techniques in the realms of sight, sound, and movement that will bring new hope to the baffling problem of the neglected regressed psychotic.

#### **NEW YORK UNIVERSITY AND THE ASSOC. FOR PHYSICAL AND MENTAL REHABILITATION**

Present

#### **AN ADAPTED PHYSICAL EDUCATION INSTITUTE**

(Corrective Therapy)

At

N. Y. U. School of Education

Washington Square, New York City

**Dec. 6, 7, 8, 1954**

Reservations: Dr. Raymond A. Weiss, N. Y. U. School of Education, Washington Sq., New York, N. Y.  
Mr. Louis F. Mantovano, 37 Clinton Ave., Rockville Centre, L. I., N. Y.

# WEIGHT TRAINING IN A NEUROPSYCHIATRIC HOSPITAL

PHILIP J. RASCH, M. A.\*

RICHARD V. FREEMAN, M. D.\*

In a previous article in this Journal the writers have reviewed at some length the physiological factors upon which weight training rests<sup>1</sup>. It is the purpose of the present paper to discuss the practical problems of weight training in a neuropsychiatric hospital.

## Selection of Patients

One of the principal problems confronting a therapist in a neuropsychiatric hospital is the selection of the proper activity to achieve the prescription goal established for a given patient. Is there any way in which a therapist may predict whether a patient may be expected to do well if introduced to weight training?

A review of the diagnoses of a small number of patients whose interest in weight training was particularly noticeable shows that they may be divided into approximately the following percentages:

Paranoid Schizophrenia	61%
Reactive Depression	6%
Psychomotor Epilepsy	6%
Head Trauma	11%
Inadequate Personality	5%
Psychoneurosis Mixed	6%
Acute Brain Syndrome	5%

These figures, of course, represent patients treated over a period of time. However, in a hospital as large as this the population diagnoses percentages remain relatively static. The most recent figures available are those for 1953; unfortunately, they are not broken down in quite the same divisions as those given above:

Paranoid Schizophrenia	31%
Depressive Reaction	3%
Epilepsy	2%
Trauma	.01%
Inadequate Personality	1%
Psychoneurosis	5%
Diseases of the Nervous System	5%
All Others	53%

Since a direct comparison is not possible, it would be unwise to attempt any generalizations on this basis.

\*Mr. Rasch is a former member of the Corrective Therapy staff and Dr. Freeman is Chief of the Physical Medicine Rehabilitation Service, Neuropsychiatric Hospital, Veterans Administration Center, Los Angeles, Calif.

Simple inspection suggests that weight trainers differ from the normal hospital population principally in attracting a higher percentage of paranoid schizophrenics, inadequate personalities, epileptics and head trauma cases than might be anticipated.

The fact that the percentage of paranoid schizophrenics and inadequate personalities is much higher among the sample of weight trainers than among the normal hospital population seems strictly in accord with psychological theory. Freud has long since shown that both narcissism<sup>2</sup> and persecutory paranoia<sup>3</sup> are related to defenses against homosexual urges. Studies by Henry<sup>4</sup>, Thune<sup>5</sup>, and Harlow<sup>6</sup> suggest that the typical weight trainer shows strong feelings of introversion, inadequacy, or homosexuality. We may expect then, that weight training will appeal especially to neuropsychiatric patients having latent homosexual urges, which may be related to narcissism or persecutory paranoia.

On the other hand, experience has shown that few former athletes display much interest in this activity. They much prefer to participate in competitive sports such as basketball or volleyball. The typical candidate for weight training is likely to be a patient who has never had much success in athletics, whether the cause be found in his lack of physical development, poor motor ability, or simply absence of opportunity for participation. The motivating force behind such individuals is often a desire for narcissistic gratification. Many of them have told one of the writers quite frankly that their main ambition is to build up to the point that they can "show off" on the beach. The physical educator, trained in the functional approach that the purpose of developing muscles is to be able to do something with them, often finds it hard to accept this frank avowal of display rather than of use. However, another study<sup>7</sup> has indicated that the same is

<sup>1</sup>Philip J. Rasch and Richard V. Freeman, "The Physiology of Progressive Resistance Exercise: A Review," *The Journal of the Association for Physical and Mental Rehabilitation*.

<sup>2</sup>Sigmund Freud, *A General Introduction to Psychoanalysis*. New York: Garden City Publishing Company, 1938, p. 369.

<sup>3</sup>Ibid, p. 368.

<sup>4</sup>Franklin M. Henry, "Personality Differences in Athletes, Physical Education and Aviation Students," *Psychological Bulletin*, 38:745, October, 1941.

<sup>5</sup>John B. Thune, "Personality of Weightlifters," *The Research Quarterly*, 20:296-306, October, 1949.

<sup>6</sup>Robert G. Harlow, "Masculine Inadequacy and Compensatory Development of Physique," *Journal of Personality*, 19:312-323, March, 1951.

true in commercially operated gymnasias, and since the role of the therapist is to assist the patient in meeting his needs, there is nothing to be gained and much to be lost by arguing with the patient on the subject. After he has achieved the body image which he has in mind, it may be possible to guide the patient into some activity in which his muscles are of use, such as wrestling or gymnastics.

#### Safety Precautions

When it was first suggested that weight training be introduced into the Corrective Therapy program in this hospital, there was considerable opposition to the idea. It was argued that violent patients might use the bars as weapons or the plates as missiles, or that patient might injure themselves in the handling of heavy weights. Some of the psychiatric aides felt that this activity would make patients stronger so that they would become much more difficult to manage when in a disturbed state.

The force of these objections had to be recognized. Brennan has pointed out that

Weight-lifting, which many people wrongly think to be the most bovine of athletics does not depend solely on brawn. It calls for the right use, at the exact second, of all muscles; there is a complicated decision to be made. The thrill of weight-lifting is that, failing this precise co-ordination of every part of the human body, the man finds himself in trouble with the weight. Muscular co-ordination is only necessary when the weight exceeds the normal lifting power of the particular limbs applied to it, and an error of judgment when lifting in this manner leads to torn muscles or a squashed body.

From the practical standpoint we do not accept as weight trainers patients who cannot or will not do precisely as they are instructed when handling weights. Patients having severe muscle tremors are permitted to work only on the various pulley machines, where a dropped weight can hurt neither themselves nor others.

With only a few exceptions, seriously disturbed patients have not been introduced to this form of training, and, when they have been, only one or two have been handled at a time. Over a period of about five years there have been no episodes of aggressive use of the equipment. Practice of the fast lifts (clean and jerk, snatch, etc.) and most one-arm lifts (snatch, one-arm swing, bent press, etc.) has been definitely discouraged. In most of them the weight must be dropped if the lift is not successfully concluded and this has definite possibilities of danger to other patients working out in the same area. As a result of these precautions our worst injury has been two

broken fingers, suffered when a patient doing squats slipped and put a hand on the ground to steady himself. The weight rolled off his shoulders and dropped on his fingers.

When weight training was first introduced into this hospital there was considerable hesitation over accepting epileptics for this activity. It was feared that if one of them was taken with a seizure while exercising he might be seriously injured. The Chief of Professional Services finally ruled that such patients should be accepted as he felt that the CO<sub>2</sub> produced in the system by the exercise might inhibit the appearance of epileptic attacks. Since then we have had a considerable amount of experience with individuals so afflicted. There has been no incident in which an epileptic has had a seizure while actually exercising although many of them have had such attacks just after completing an exercise. In such cases we simply see that the patient is in a comfortable position and leave him alone. Within a few minutes he recovers and resumes his training. After a patient has had two or three seizures the novelty wears off. Other trainees then cease to pay much attention to such episodes and continue with their workouts with no apparent disturbance.

Since one of our weight training centers is outdoors, we have cold and windy weather with which to contend. Our experience has been that muscle strains are usually incurred either in the spinae erectoris or in the rhomboideus. To minimize the possibility of such injuries, considerable emphasis is placed on warming up exercises, particularly of a stretching nature. Patients are encouraged to wear sweat shirts during cool weather and to keep themselves clothed between exercises. This is rather difficult to enforce and requires constant supervision on the part of the therapist. A certain percentage of minor muscle strains have been experienced, but there have been none of a serious nature.

The fears of the aides have proven completely unfounded, although even yet one will occasionally express surprise that the weight trainers do not use their muscles "to tear people apart." The reason probably lies in the personality factors which result in an individual participating seriously in weight training. In general, such patients are not aggressive in nature, although there is always the exception. Usually these latter seem to have delusions that others are talking about them or making fun of them and may exhibit overt hostility towards those whom they suspect of such conduct.

It is the writers' opinion that weight training does possess certain inherent possibilities for danger, but by proper attention to the above points and close supervision of patients during their workouts these can be minimized to the degree that they need not be

<sup>1</sup>Anonymous, "Body Building," *Fortune*, XXXV:95-98, February, 1947.

<sup>2</sup>Niall Brennan, *The Making of a Moron*. New York: Sheed and Ward, 1953, pp. 40-41.

considered contraindications to the use of weights in a corrective therapy program in a neuropsychiatric hospital.

#### Programs

Newcomers to this activity are placed upon a general body building program. We have experimented with various routines and believe that the double progressive system is the most satisfactory for beginners. In this system the patient starts out by doing five repetitions of each arm exercise and ten of each leg or back exercise. Each week he adds one repetition to the arm exercises and two to each leg or back exercise. After he has worked up to ten and twenty repetitions respectively, he adds five pounds to the weights used for the arms and ten to those used for the legs or back and starts over again with the five and ten count. There is some evidence that a heavy and light type of routine may offer greater results for the amount of time spent in exercising, but it has been our experience that the continual changing of weights involved is an objectionable feature in working with groups. In either case, the patient trains only three days a week, with no heavy work, such as wrestling or gymnastics, on his free days.

Our standard program for beginners is based on two articles by Morehouse and Rasch<sup>10</sup> with certain modifications that additional experience and the availability of exercise equipment have suggested. Exercises are performed in the following sequence:

1. **TWO ARM PRESS**—Weight is held at the chest, feet in line and about a foot apart. Knees are kept straight and back erect. The weight is pushed to arms' length.

2. **TWO ARM HIGH PULL UP**—Lifter stands erect, holding the bar with both hands at the center, palms in. The weight is pulled up in front of the chin, the elbows being raised as high as possible.

3. **TWO ARM CURL**—Standing erect, trainee holds weight with palms out and hands about shoulder width apart. The elbows are kept in place at the sides and the weight is slowly raised to the chest. Heaving or leaning back must be avoided.

4. **REVERSE CURL**—As above, except that the palms face in.

5. **SQUAT**—The bar is placed on standards and loaded there. The lifter then bends his knees, steps under it, feet in line and about a foot apart. Straightening his knees, he lifts the weights clear of the standards, positioning it on his shoulders behind his neck. He then steps backward one or two steps to clear the standards and commences to squat. Beginners find it easier to step forward; the objection to this is that they

must then step back to replace the weight. In doing this they sometimes knock one standard down. The alternative method of turning around with the weight on the shoulders may result in strain of the trunk muscles if done hurriedly. The lifter is instructed to make not more than a three-quarters squat. We have never been convinced of the validity of Kranz's theory that squats are injurious to the knee joint<sup>11</sup> but it does seem that a larger amount of lower back soreness occurs among patients who do full squats than among those who do not. Some of our therapists use a low bench, having the patient squat until he sits on it and then stands erect again. The heels should be kept on the ground. It will be found that many patients are too tight in the thigh muscles to do this. This condition will loosen in a short time, but these individuals may place their heels on a piece of 2" x 6" until they become able to squat properly. Some of our therapists use such a lift permanently, as it causes somewhat different development. A towel or some other material must be wrapped around the bar to prevent chafing at the level of the seventh cervical vertebra.

6. **HEEL RAISE**—Following completion of the squat, the patient retains the weight on his shoulders and raises the heels as high off the ground as possible. One third of the repetitions are done with the toes pointing straight ahead, one third toeing out as far as possible, and one third toeing in as far as possible.

7. **BENT ARM PULL OVER**—Patient lies supine on a low bench, with the knees bent and his heels close to his buttocks. The weight is held at the chest. Keeping the elbows bent, the lifter swings the weight back overhead and down as far as possible, then pulls it back on the chest. The elbows must be kept pointing up; there is a natural tendency for them to go out to the sides.

8. **DEAD LIFT**—The lifter picks up the weight and stands erect. Keeping the legs straight, he bends at the waist and lowers the weight until it is a couple of inches off the platform. He then returns to the erect position and contracts the upper back muscles, as though trying to pull the scapulae together.

9. **BENT ARM PULL OVER** (repeat of exercise No. 7). Some instructors prefer to use one set of bent arm and one set of straight arm pullovers. Our experience has been that with straight arm pull overs the patients sooner or later begin to complain of soreness in the elbows. As a result we do not use them.

10. **BENCH PRESS**—Patient lies supine on a low bench, with his feet on the ground. The weight is taken at the chest and pressed upwards until the arms are straight.

11. **LAT MACHINE**—This is actually simply an over-

<sup>10</sup>Lawrence E. Morehouse and Philip J. Rasch, "Weight Training," *Scholastic Coach*, 17:12-14, December, 1947.

<sup>11</sup>Lawrence E. Morehouse and Philip J. Rasch, "Weight Training," *Scholastic Coach*, 17:13-16, February, 1948.

"Fred L. O'Keefe, "Early Conditioning for Football," *The Athletic Journal*, XXVI:25-26, June, 1946.

head pulley arrangement. The exerciser stands facing it with his arms straight. He swings the bar down to his thighs without bending the arms at the elbows or leaning forward at the waist.

12. INCLINE BOARD—Our incline board is slanted at 45 degrees. The trainee takes the weight to the chest, lies back on the board and presses the weight to arms' length.

13. NECK EXERCISES—Bridging, towel work, "bullying," etc.

14. ABDOMINAL WORK—Sit ups with bent knees, leg raises and body twists on an abdominal board.

With advanced students we shift to a set program. In this the student uses comparatively few exercises—say a press, curl, squat, dead lift, and bench press combination. An exercise is done five times. After a rest period it is done another five times. A second rest period is followed by a third set of five repetitions. Weight is added whenever the patient feels that he can handle more. In addition he may do one or two exercises to develop parts in which he is especially interested. With our patients, sitting astride of a low bench under the lat machine and using it to perform pull downs to the back of the neck is especially popular, as they feel that this is a valuable aid in achieving "the Vee shape."

The few patients who have been here for a considerable length of time usually prefer a super set system, that is, a set of exercises for one muscle group followed immediately by a set for its antagonists, as curls followed by French presses. These trainees often lie supine on a low bench and use the lat machine to perform their curls, and then swing around to the other end of the bench and use a barbell to perform French presses in the supine position.

Experience has shown that either a set program or a super set program is too fatiguing for beginners. The latter especially should be employed only with patients who have trained for a year or more. Regardless of which type of program is used, we stress that the exercises must be done slowly and in proper form.

It may be objected that our beginners' program includes too much pressing. However, this is deliberate. It has been indicated that most weight trainers in a neuropsychiatric hospital emphasize narcissistic gratification. This may be gained either by the development of muscle girths or by development of strength. The two do not necessarily go together—very few Mr. Americas have been creditable weight lifters and vice versa. It has been our experience that patients comparing their strength by competing in lifting barbells almost invariably do so by seeing who can press the most. The concentration on pressing in the training program represents an attempt on our part to insure that in any impromptu competition

with men of their own size, or even somewhat larger, the weight trainer will come off victorious and thus receive some of the ego gratification which he craves.

#### Results

Evaluation of any program in a neuropsychiatric hospital is complicated by the fact that the team approach exposes the patient to many forms of treatment and it is almost never possible to determine just what any one form of therapy contributed to his rehabilitation. We have considerable evidence that many of these patients have continued this form of activity as a hobby after leaving the hospital. Many of them join gymnasias or Y.M.C.As.; others buy a barbell set and train in their bedrooms or garages. There have been sufficient of the latter so that we found it desirable to contact the local manufacturers of and dealers in barbells and endeavor to arrange a discount for patients leaving the hospital and desiring to continue their training. Occasionally we will receive letters from patients who have left the city and desire some advice on their training programs. As a matter of policy we encourage the patient to join a gym or Y.M.C.A. rather than to work by himself, as we regard the socializing involved as of great assistance in enabling the patient to readjust to the external world. Where finances or location will not permit membership in a gym, we urge him to get a few training partners to work with. One former patient who was introduced to weight training in our gymnasias and who continued his training after leaving the hospital recently won "best arms" at an important physique contest, and is reported to have won "best abdominals" in an earlier show.

Even more gratifying are those cases in which the patient gives weight training credit both for assisting in his rehabilitation and putting him in shape to keep a job after he got one. A typical case history of this type is that of L. B.

A 25-year-old single white male was weighed down by a sense of guilt, which he rationalized as remorse for the fact that he had been a "rounder" and a "heavy drinker," which made him unwelcome in society. He had a history of participation in athletics, but displayed little response to any of the customary sports and games. The psychiatrist eventually prescribed him for group psychotherapy. This proved so distressing to the patient that sessions were often followed by noticeable muscle tremors. He asked the therapist for hard work and was placed on a weight training program in which the lifting of maximum weights was stressed. These workouts left him physically tired and drained of his nervous tension. He was thus enabled literally to "sweat out" the conflicts aroused by the psychotherapy sessions and to satisfy his need for

punishment by forcing his body to exert itself to something approaching its maximum. After he had trained on a certain exercise for some weeks, a physically bigger but untrained patient was persuaded to try it. After watching him struggle unavailingly with the weight, the trainee turned to the therapist and remarked, "For the first time I feel that these exercises are really doing me some good." Thereafter he trained with great enthusiasm.

After leaving the hospital he wrote a letter to Chief, Corrective Therapy in which he said:

"I felt unable to do anything for myself when I first started to work out. The help and encouragement of your men made me try harder. I often came to the gym feeling worn out, but soon found myself doing more work than I thought I could. It was more than a physical rehabilitation. In fact, I consider your program instrumental in giving me new courage to face all my problems."

Subsequently he sent his thanks to the corrective therapist for putting him in shape to stand a nine-hour work day six days a week.

In the literature of corrective therapy it is repeatedly emphasized that the exercise is not the important objective; it is simply a means to the establishment of interpersonal relationships. Actually this is difficult to do during the activity itself. Men playing catch or kicking a football are apt to be quite a distance apart; players in volleyball or other competitive situations must of necessity devote their primary attention to the game situation. It is precisely the fact that a weight training session consists of several separate periods of vigorous activity, each of which is followed by a period of rest, that renders it almost unique in athletics. Each of these rest periods affords the therapist a chance to establish a relationship with the lifter. A word of encouragement or suggestion comes quite naturally after each exercise. If the therapist trains with his patients, they find it easy to ask questions about what he has just done, or to offer some other comment. From these starts they quite naturally expand into speaking of their problems. If these confidences are received non-judgmentally and with sympathetic interest by the therapist, the patient will gradually reveal more and more of the dynamics underlying his illness. It is not within the province of the therapist to employ information thus gained to personally establish treatment procedure. Instead he must consult regularly with the psychiatrist in charge of the case, who will direct him how to handle the situation as it develops and who will coordinate the work of the corrective therapist with that of the various other therapists. To facilitate such interchange it is desirable that the lifting group be kept small. About six patients is the maximum num-

ber to whom a therapist can do justice at any one time.

#### *Weight Training Gymnasium*

Those who are considering introducing weight training into their hospitals but who have not had personal experience with it might be interested in knowing what equipment is required. First, about three two-hundred pound plate-loading barbell practice sets will be needed. Four or six fifty pound plates and the same number of extra twenty-five pounders will be useful. Do not accept any bars less than five feet long. Extra bars and dumbbell handles can be obtained from Manual Arts Therapy or some other source simply by cutting off some pieces of 1½" stock. Dumbbell handles should be about 20" long if standard collars are to be used; it will be found advantageous to have narrow collars made so that the length of these handles may be reduced. Later on it may be found desirable to purchase one official weight lifting set for the exclusive use of advanced trainees.

It is desirable that all lifting be done on a heavy wooden platform, at least 12' x 12'. Inevitably the weights will be dropped occasionally. If they fall on a concrete floor the bar is sure to be bent; on asphalt they will put a hole in the surfacing.

Two heavy benches will be needed. These should be not over 10" wide.

With this minimum amount of equipment the gym will be ready for business. Depending upon one's mechanical aptitude additional equipment is limited only by the ingenuity of the therapist. We have constructed standards for holding a weight for squatting (made from the bases of two indoor volleyball posts and some old pipe), a leg press machine (made from an old desk top, the bases for an overhead ladder, some pipe and some iron bar stock), an incline board, a power grip and a lat machine. Such equipment lends variety to the program, is popular with the trainees and can be built very largely from salvaged material at very little expense.

#### *Summary*

The theory, aims, and techniques of a weight training program in a neuropsychiatric hospital are discussed. The dynamics underlying narcissism and persecutory paranoia are considered, and lead to a frank acceptance of narcissistic gratification as the primary aim of the program. A consideration of the diagnostic categories referred to Corrective Therapy having sufficient interest for weight training emphasizes this need. However, we never lose sight of the primary value of interpersonal relationships in corrective and other therapies; therefore, the program capitalizes on the resultant relationships between patient and therapist, and in some cases between patient and patient. Exercise programming is discussed in detail and we have provided explicit guidelines for establishing and maintaining such a program. Particular opportuni-

ties for therapist emphasis on interpersonal relationships are mentioned. We note especially that convulsive disorders are no contraindication and we have never found that the increased muscle power resulting from the program has increased the management

problems with hostile, regressed, or combative patients. We conclude that this program is valuable in the armamentarium of the modern neuropsychiatric hospital and some short case studies illustrating its values are cited.

---

## GROUP DYNAMICS AS A THERAPEUTIC AGENT

WILLIAM W. YOUNG, M. D.\*

RALPH SIMON, Ph.D.

Since the inception of a rehabilitation ward at this tuberculosis hospital over a year ago, we have on several occasions been impressed by the almost dramatic progress which occurred in some of the patients for whom, in all ignorance, we had entertained a very guarded, if not pessimistic prognosis. It is possible that some persons might have attributed these changes to coincidence, drugs or some other fortuitous circumstance. In an effort to ascertain the factors responsible for the change, a very thorough study of each case was made. Such factors as the patient's age, education, intelligence, marital status, financial status, religious affiliations, vocational achievements, medical treatment, and delayed effects of drugs were considered. As each case was studied, we noted that the identification a patient established with others on the ward was the uniformly new factor which seemed to be present rather consistently. This was accepted first as a premise but as further case studies seemed to bear this out, all concerned were faced with the necessity of recognizing and accepting the dynamics of the group as a therapeutic agent of no little value and potency. While we had, due to past experiences, been aware of the significance of group processes, and planned the operation of the ward on the basis of certain principles of group dynamics, we were not totally prepared for the results obtained. It will be our purpose to elucidate the philosophy employed in planning this ward and to illustrate by means of case studies the effectiveness of these group forces and processes.

The transfer to the rehabilitation ward represents a shift in therapeutic emphasis. On the active treatment wards the emphasis is placed upon the lung

pathology; while on the rehabilitation ward the patient is to be treated as a dynamic biological unit, no aspect of which is to be neglected. It was our conviction that the authorities responsible for a rehabilitation ward must like and respect people, must induce the members of the rehabilitation team to operate with a unity of purpose, to think and act in complementary ways. They must have, and be able, to invest confidence in others, patients and staff alike. They must believe in the inherent drives and capacity on the part of the patient for self-direction, self-responsibility, and self-realization. Finally, and the most important, they must be able to translate these convictions into actions. Under such conditions the dynamics which spring from the group become a powerful force which perhaps, even more than medicine or diet, wield the most potent influence on the ward. In recognition of this force, we have attempted to employ it to the best of our skill, experience and judgment toward the rehabilitation goal. We have exploited it in many ways, among which has been to encourage the maladjusted individual who has developed unhealthy and asocial behavior patterns, to develop more healthy modes of behavior. This is a type of force that not only permits, but encourages and fosters individualized treatment. The following example illustrates this point.

This patient was a psychotic in remission whose problems were further complicated by his propensity for alcohol. Having been returned to this hospital after a period at an NP hospital, he remained withdrawn and rejected any form of assistance. He was as much aware of his need for help as we were, but he was unable to accept it. At this point his tuberculosis was the least of his problems. The lung pathology was arrested and physically, his condition was acceptable. Socially, his only contact was with an edu-

\*Chief, Physical Medicine and Rehabilitation Service and Chief Clinical Psychologist respectively, Veterans Administration Hospital, Butler, Pa.

tional therapist who provided him with some review mathematics which he could readily do, and from which he received some satisfaction. He was encouraged to take passes, although the threat of intoxication was very real. But recognizing that the personnel were interested in him, he cooperated to the best of his ability. He would drink until he felt a bit high, and then rent a hotel room to sleep it off. He returned to the hospital sufficiently under control, but a trifle late, and sufficiently under the weather to call attention to himself. This would require an interview with the physician. It was noted that the patient used this period very fruitfully to express his concerns and establish a relationship with an important figure of his life. To accommodate the regulations and also to let the patient feel that he was essentially the same as anyone else, he was usually given a minimum penalty. Under these conditions he gradually worked himself up to a position where he could be discharged. Certainly with all the difficulties presented by this patient, prognosis is still guarded; but we felt that when he left the hospital, he received all that could be given that would approximate maximum rehabilitation. Furthermore, his discharge meant, at least for a while, no return to an NP hospital or transfer to a domiciliary.

In this instance, the patients were as much aware of the special treatment given this patient as was the staff. In effect, they applauded the efforts of the staff and encouraged their continuance. It is true that in certain cases our confidences can be misplaced; but we feel that only if we can invest confidence in others, can we expect them to take responsibility for their actions.

We have found that the forces developed by the group can be quite effective in dealing with patients having socio-psychological problems. When it is recognized that many of our patients have made poor social adjustments and have had difficulties in their interpersonal relationships, the identification with, and pride in belonging to, the group enables many patients to attain a social as well as physical recovery. The therapeutic value of the group is well illustrated in the following case.

Mr. B. was seen on admission by the psychologist for routine examination. It was noted that he was emotionally upset and it was recommended that he be referred for psychotherapy. This was accomplished, but the patient refused psychotherapy after the psychological examinations. He didn't deny his problems, but simply felt that he could handle them alone. On the treatment ward he was characterized as being offensive, overly aggressive, abusive, and belligerent. Having been hurt by people in the past, and more recently by his wife who was divorcing him, he was distrustful of others. Attempts at offering him

help were met with scorn. His initial attitude toward the rehabilitation ward was that he was not going to do any work for anyone else. Attempts to clarify his misperception of the purpose of the rehabilitation ward were initially in vain. It was thought that once he experienced the situation, his perceptions might change. And change they did. Although he had great disdain for people, he also wanted to be liked. He had to take stock of himself and found that in order to become an accepted part of the group, he would have to relinquish some of his offensive behavior. As he relaxed, so were the barriers that prevented him from attaining his admission. With the staff he found the same type of reaction. The therapeutic effects of the group on this patient are best seen in the following incident. One morning the ward physician found a note on his desk from a nurse concerning the patient. The physician called him into the office and read it to him. It said in effect that the patient was seen breaking into the chow line at the cafeteria, and that some of the patients were angry. The patient's first reaction was, "Well, what are you going to do about it?" The physician replied that he intended to do no more than what he did, that is, read it to the patient. He indicated that he thought the patient would be interested in knowing how others reacted to his behavior since the patient was getting ready to go back to society where he would have to get along with people. The patient thanked the physician and left. The next morning he asked the nurse for permission to meet with the group and indicated he would be careful in the future. He found that since his belligerence was not met with reprisals, and that he was accepted as he was, he no longer had the need to maintain the guise of a belligerent. For this man, rehabilitation was essentially a psycho-social affair. His tuberculosis had been arrested, and he had a job waiting for him. However, we felt his chances for relapse were great unless he could remove the chips from his shoulders and learn to get along with and trust people.

A week before he was discharged, he approached the psychologist to let him know how things were going. He looked like the same man, but you knew he had changed. The facts of his marital situation had not changed, but he had seen them in a different light—one which he now could accept. We were confident when this man left the hospital that he would be able to adjust to society and sustain himself as a responsible citizen.

While we have tried to highlight the influence of group forces on individual problem cases, it would be remiss if we failed to appreciate its more subtle effects on the "average" patients who comprise the group. Recognizing that each person in his environment, which is the case in the rehabilitation ward, has

a healthy desire to be an integral part of his community, he will make some effort to be accepted and identified with his group. By channeling these forces, either through some formal group, like a Patient Council or some less structured organization, the patients can be encouraged to assume increasing responsibilities for the conduct and maintenance of their ward. All the healthy behavioral attributes such as gregariousness, social intercourse, independence, responsibility, etc. can be initiated on the ward in anticipation of their growth following discharge.

We submit that the action of any rehabilitation ward reflects the ideologies prevalent in the institution and these, in turn, mirror the degree of enlightenment of those in authority. Within these limits and those imposed by the medical and surgical connotations, we have tried to create an environment on the rehabilitation ward which encourages social interaction and fosters self-care. The rehabilitation ward represents the last stages in rehabilitation in this environment; and if our objective is to develop the inherent potentials of the patient to attain maturity

and responsibility, training in the exercise of those qualities must, of necessity, be a part of the medical curriculum. This means that self-discipline is to be substituted for obedience to authority as much as possible. The ability to make decisions, to express a choice of behavior, to strive for independence are to be encouraged. This is essentially a learning process, and can be employed only if there is elasticity permitted in the application of rules and regulations.

Most frequently, the attitude is taken that the patient alone is required to measure up. We believe that the staff is subject to the same demands. Only if the staff has belief in the individual's inherent striving for these goals, and can provide the conditions under which they can become evidenced, can we feel that our responsibility has been fully discharged. Our experience with this group and the inherent group forces bolsters our faith in the individual's desire to assume maturity and independence, and to create the conditions and influence conducive to their realization.

---

## DEVELOPMENT OF EVALUATIVE METHODS FOR ASSESSING EFFECTIVENESS OF CORRECTIVE THERAPY IN THE TREATMENT OF THE PSYCHIATRIC PATIENT\*

H. S. CURTIS, Ph.D.\*\*

At this point there appears to be no reason to doubt that corrective therapy is getting results. With your combination of physical, psychological, and reeducational approaches, you are making progress with a type of psychiatric patient who has not responded well to other therapies. At the same time, your profession has developed mostly on an empirical basis. If a technique seemed to work, it was continued. If it didn't, it was dropped. This is good, and will of course be continued. Under such circumstances there is a tendency for each therapist to develop his own techniques on the basis of his experience and that of the physician who prescribes the treatment. The result is that at different hospitals a tremendous number of methods are used successfully, but there is little systematic evidence to show which ones are better

than others. In order to bring about the greatest contribution that your profession is capable of making, some sort of evaluation is necessary to determine just what is being accomplished, how it is being brought about, and how it can be improved.

If, as a psychologist, I look at the problem, and if we consider the task to be that of a complete evaluation of the effectiveness of your techniques, then it is a tremendous research project. It is so large that it is an unsolved assignment in all the other therapies as well as yours. In some fields, large research projects are underway at the present time. It is hoped that eventually they will provide answers to some of the important questions, but at this time this is largely in the wishful stage. Such an approach to the problem demands full-time research personnel, large funds, and extensive time available by research-trained staff members. This method of attacking the evaluation problem is usually regarded as utopian and impractical. In the long run it might actually be the cheapest and most efficient way of meeting the issue.

\*Presented at the Eighth Annual Conference and Scientific Conference of The Association for Physical and Mental Rehabilitation, Cleveland, Ohio, July 1, 1954.

\*\*Chief Clinical Psychologist, Cleveland Regional Office, Veterans Administration.

If I look at the problem not from the point of view of a psychologist, but from a purely practical approach, it adds up to a large number of individuals doing small research projects that are capable of being put together in such a way as to eliminate gradually the less effective ways of doing things, and to retain and develop the more effective. This is what we are trying to do in psychology in a halting and somewhat disorganized way.

Now, I realize that corrective therapists have widely varying backgrounds, and that most of them have not had extensive training or experience in research methodology. There are some among your group, however, who are qualified by training and interest to embark on evaluative research projects in addition to their regular duties. There are probably a few corrective therapists who are sufficiently research oriented so that they should do research as their major assignment. I am sure that there are many corrective therapists who would like to study their techniques in a systematic manner but who feel that they are not prepared to carry out independent research. Finally, there is the large group of corrective therapists who, while not prepared for or interested in research, can grow more rapidly in their work if they subject their techniques to some type of objective evaluation.

For the relatively small number of your group who are interested in and capable of independent research, encouragement and guidance should be provided so that your profession can use them to the fullest advantage. For the larger group who are interested in the research approach, but not prepared to proceed under their own steam, there is help available. Most hospitals should have research committees that are set up to provide guidance on research plans. If any of you have a vague idea of some project you think you would like to do but don't feel that you are ready to take it to the research committee, may I suggest that you discuss it with one of the psychologists at your hospital. I am sure that he will be flattered at the request; he has had pretty complete research orientation and if he is unable to offer helpful suggestions, he should be able to find someone who can. You will probably find that he is perfectly willing to help you all the way through and he may even be able to do some of the technical and statistical work for you. He may have a psychological intern who is just itching to dig into a doctoral research problem and who will be very happy to collaborate with you in developing an idea that you have.

For the rest of the corrective therapists who are neither research trained nor oriented the ideas I have been expressing will be of very little interest. Such therapists may be sensitive individuals with a warm approach to others who achieve good results on a more or less intuitive basis. The clues they get which

determine the approach to the particular patient may be ones about which they aren't too much aware. When they try to teach their methods to others they may have a certain amount of difficulty in communicating exact techniques. I believe that these therapists can also profit from a more systematic approach to the evaluation of their jobs.

My suggestion is that at this stage of your development, behavior rating scales offer the best means of objectifying your judgments about patients and of evaluating the changes brought about in them by your therapy. If the rating scales are filled out before you start your therapy and then employed again at the completion of your contact with the patient, you will have a frame of reference against which you can evaluate the results you achieve. To make the evaluation more valid, you may be able to get the physician who prescribes the treatment to complete the rating scale before and after that process. If you want to make the situation still more objective, have the ward nurse also fill out the rating scales. Discussion of the points of disagreement should be most enlightening. Then if you make a pretty complete description of the techniques you employ with the patient a part of the record, you will have data that can be studied and evaluated by an outsider. This material, especially if it is uniform from one hospital to another, can become the basis for a more general evaluation of your techniques by more refined research techniques.

Another suggestion is that with a few of the patients he works with, the corrective therapist should keep a detailed chronological account of his own behavior and that of the patient from the start of treatment to its completion. After keeping a few of these records, they could be studied to find similarities, differences, and generalizations that could be made about the patient's and therapist's reaction to the treatment. If the therapist also included his own feelings before, during, and after seeing the patient, he might develop some surprising insights into his habitual methods of approaching other people.

The procedures suggested are time consuming it is true, but they do not take as long as you might think. In my opinion they would pay off many times over in terms of results. The greatest contribution would be in terms of sharpening up and refining the observations made by the therapist. When he puts it down on paper in the same way for each patient, he begins to make comparisons between techniques and results in a more systematic manner. He makes inferences that would never have occurred to him with a hit and miss approach. The same applies to the physician who is responsible for the patient. His prescriptions are based on his experience with other patients, his training, and his relationship to the particular patient and therapist. Systematizing and objectifying the form

of his observations will enable him to arrive more rapidly at generalizations that apply to other patients. It will also enable him to make his prescriptions concerning type of therapy more adequate for later patients.

It seems to me that the topic of this panel indicates that your profession is growing in a healthy fashion. You are young, you are developing, and you realize that self-evaluation should begin before the arteries start to harden and the protection of professional position becomes too important. Your methods with individual patients have to be flexible, and you should attempt to remain flexible as a profession. A con-

stant program of evaluation and improvement on the basis of the findings is the best guarantee that the desired flexibility will be maintained. As other therapies change and improve, many of your methods are going to be incorporated into them if they stand the test of evaluation. Also you will find that you begin to incorporate the methods of other disciplines into your work. One of the things that I hope you are going to find useful is that of increasing the exchangeability of information from one person to another through the use of greater objectification of observation.

---

## THERAPIST OR MEDIA? — EFFECTIVENESS OF EACH IN PSYCHIATRIC REHABILITATION\*

DANIEL DANCIK, M. D.\*\*

Many factors must be taken into account in evaluating the effectiveness of the milieu therapy on patients who suffer from a psychiatric disorder. Such factors in therapy as the environment, the media used, the approach applied, the attitude assumed and the personality make-up of the therapist are only a few of the important elements that one must take into consideration when evaluating effectiveness. Hence it becomes a most difficult problem to specifically delineate any method, procedure or modality that will emphatically determine the effectiveness of corrective therapy in the treatment of the psychiatric patient. All factors are intertwined and the ineffectiveness of one element may seriously effect the outcome of treatment.

This does not necessarily apply when discussing corrective therapy in its relationship to the other fields of medicine such as orthopedics, neurology and internal medicine for in these specialties we can in a majority of instances specifically prescribe a modality in accordance with the diagnosis of the condition. In psychiatry, however, the diagnostic criteria will in no way clearly demonstrate to the therapist the proper modality to apply. For example, we all know that when given any two paranoid schizophrenic patients

to work with, these patients may demonstrate completely different patterns of behavior and symptoms. Not all paranoid schizophrenic patients have the same underlying symptomatology. One patient may be extremely tense, anxious, suspicious, hostile and threatened by a too close relationship with those about him and because of the latter, is extremely uncooperative and difficult to motivate. The other may be demanding, grandiose, aggressive and extremely antagonistic and tending to dominate a group situation. It is therefore obvious that the modality that must be applied, the approach, the attitude are completely different for each of these paranoid schizophrenic patients. An attitude of interested aloofness with activity of a solitary nature to first provide release of tension and anxiety may best be applied to the former, whereas the latter may do best with firm, sympathetic handling specifically applied to patients' narcissistic needs such as in a leadership program, conducting groups in games or in calisthenics.

The behavioral pattern and symptoms therefore that are characteristic of these patients are of infinitely more importance to the corrective therapist than the designation or diagnosis of a disease entity. The corrective therapist in a neuropsychiatric hospital recognizes the fact that the neuropsychiatric patient undergoing therapy has conflicts and anxieties which he brings to the clinic situation. The causative factors, the underlying dynamics and mechanisms that

\*Presented at the Eighth Annual Clinical and Scientific Conference of the Association for Physical and Mental Rehabilitation, Cleveland, Ohio, July 1, 1954.

\*\*Chief, Physical Medicine and Rehabilitation Service, Veterans Administration Hospital, Northport, N. Y.

enter into these conflicts and anxieties are in all cases different and are related to numerous and varied forces that are rarely, if ever, the same and related, thus limiting the corrective therapist in his ability to apply a generally routine and selected form of therapy that can be called specific. And in my estimation the major factor in this milieu therapy of the neuropsychiatric patient is the personality and attitude of the therapist. It is therefore necessary for the corrective therapist, in order to best apply the knowledge of his techniques, to deal with the anxieties and symptoms of the patient not only on the level of his training and specialty, but in order that he may best apply the media selected it is necessary for him to clarify his own personality needs so that he may give proper emphasis to himself as a therapist. To do this certain obligations are involved and not the least of these is a willingness of the therapist to know himself—to examine his strength and his weaknesses. This is necessary in order that the therapist's own personality needs are not projected upon the patient and that he not become threatened by the close relationship which may develop. In effect, the therapist must be able to master his own prejudices, dislikes, frustrations and anxieties and accept the behavior and reactions of these patients as symptomatic of their illness. The therapist must be prepared to cope with the resistances and negativism and potential violence that may arise and must recognize these symptoms as a manifestation of the patient's possible reaction to the therapist, the environment, the modality, etc. He must be always alert to shift or alter his techniques or approach and, if possible, recognize to a degree his own limitations in his relations with the patient.

As for the media or modality used, it is of importance only if the therapist is capable of selecting the proper technique and applying it in the proper manner, attitude and with the proper approach. The media, properly applied, serves only as a means of making the necessary contact with the patient, to gain the necessary rapport, to establish a satisfying and positive transference relationship. We all readily recognize the fact that any activity or modality, whether verbal or motile, cannot occur in a vacuum. This vacuum must be filled with energy producing and energy consuming forces. These forces represent the specialized technique which you as corrective therapist apply in an attempt to gain a response. Whether the "forces invoked" be creative in work, energy releasing in play and exercise, verbalizing in learning, the degree of response will be only as effective as your ability, personality and awareness of psychiatric symptoms will be capable of eliciting a positive and a favorable response. To further amplify, many of you have observed in your departments two therapists engaged in the same activity with separate

but identical groups of patients. One therapist gets excellent results, the other therapist gets very poor results. How can one account for this difference? The difference must be in the therapists themselves. There is apparently nothing in the activities which will account for it. We feel that in a good therapeutic relationship you get a stimulation of interest, a stimulation to participate and even a stimulation to get well. These can be transmitted from therapist to patient.

I do not intend to discuss the psychological and physiological factors that are ever present in exercise and play when applied as a modality to psychiatric patients. As a therapist you bring to play numerous psychological and physiological manifestations as a result of your techniques and with your background, training and education you also bring to the patient through your specialized techniques factors that are capable of manipulating the environment at will for the patient's positive or favorable and negative or detrimental effect. Thus, in effect, you create a laboratory situation with yourself as a medium into which the patient is placed and where you participate in this environment. In this laboratory you are required to observe the effects of your synthesis, attempt to intermingle your personality, attitude and approach with the properly selected media or modality. The media selected should fundamentally depend on the needs of the individual patient or the group. Therefore your responsibility is first to the patient. It is your keenness of awareness in recording and observing any symptom changes and responses of the patient that indicate the specialized training given you and which emphasizes you as a therapist. It is therefore of extreme importance that you be capable of observing and recording certain symptom responses or changes to the media applied. For it is you that manipulates the patient into the environmental situation or laboratory media and goads him to activity. You are authorized to do this by the prescription handed you. You alone can apprise the physician of what you have observed in the application of your media.

Your liaison with the physician is by means of the progress note. I have never recommended any standard form but only an acute eye, a sharp pencil, and the ability to describe what you see. To uphold your part as a member of the "psychiatric team" you are required to report to the psychiatrist the manner in which the prescription was carried out and the results obtained. In your clinic the patient is afforded an opportunity to express himself within the limits of his illness. In the clinic situation the corrective therapist observes carefully the behavioral manifestations that may be displayed. Interpersonal relationships are also easily noted in this setting. What is the patient's attitude toward the therapist? To the group?

To the activity? What are the patient's relationships to others in the clinic? These are the facts you must keep uppermost and in your planning and selection of media your program must be always patient-centered instead of activity-centered. Observing this, you will be in a far more favorable position to transmit to the physician concrete information about the patient's current behavior.

In neuropsychiatric hospitals with good liaison between the physician and therapist, informal observations made by the latter are of a real value to the physician. The corrective therapist has the advantage of observing the patient's actual behavior in a variety of situations which approximate life outside the hospital to a greater degree than does the doctor in his interview. With more objective description of this behavior, your contribution to the physician could be of greater diagnostic as well as therapeutic value.

Goodrich, Bockoven and Hyde<sup>1</sup> have shown through their studies at the Boston Psychopathic Hospital that the therapist's observation of certain important and selected data can be effectively applied to assist in determining the degree of improvement of a psychotic patient. Through the use of activity they have attempted to categorize certain important criteria in the study of human behavior by a quantitative evaluation of the patient's responses to activity, his modes of self expression, his spontaneity, responsiveness to others, ability to perform in a sustained manner, and relationship with other people.

These factors have been used to study the degree of recovery of psychotic patients. Since the behavior of various types of psychotics is different, a number of patterns of recovery were observed which were distinctive for the manic depressive and for the schizophrenic type of psychosis. Certain trends were noted to take place for these psychotics as they improve. These include a gradually increasing energy output, an increase in creative self expression and increasing friendliness and sociability and were classified as follows:

- A. Activity—which showed a definite increase with improvement.
- B. Modality—which, representing the psychomotor sphere, showed an increase in improvement with an improved ability to concentrate on a task and an increase in verbalization.
- C. Continuity—referring to persistency of interest showed sustained social participation on improvement.
- D. Creativity—ability to concentrate on objective, less randomness on improvement.

<sup>1</sup>Goodrich, D. W., Bockhoven, J. S., Hyde, R. W., Behavioral Characteristics of Recovery from a Psychosis—Occupational Therapy and Rehabilitation—No. 3, June, 1951

E. Affect—on improvement, an increase in friendliness associated with an increase in emotional security and an ability to accept closer relationships with others without overt expression of hostility or retreat from people.

F. Socialization—increased with recovery.

On the other hand, Hyde, in another study<sup>2</sup> at the Boston Psychopathic Hospital attempted to determine "factors in group motivation in a mental hospital." In his study Hyde emphasized the important contribution of personnel-patient relationship especially related to those personnel who have specialized techniques and training. Most of the social interchange studied appeared to center about games. In the situations where the greatest amount of socialization occurred, it was noted that certain personnel were more effective than others in bringing about ward socialization. This was dependent to a considerable degree on their assigned duties. Occupational therapists, who are also used at the Boston Psychopathic Hospital for socializing activities, were assigned to the ward primarily to promote socialization and it was found that their relationships with patients were more favorable. Attendants and nurses, having many routine duties involving physical welfare of the patients, and the ward physician, were unable to perform a socializing role. Thus the presence of different occupational groups of personnel indicated who was in a position to interact more favorably with the patients. Hyde concluded from his study that the attendants interacted with fewer patients than any other group present, which is opposite to the belief that those personnel having closest contact would interact more. Hyde also demonstrated that the mere presence of personnel is not by itself a factor influencing favorable socialization. Personnel present who fail to interact with patients may retard socialization, they being a rejecting or unfriendly influence. Of all the personnel on the ward, including the doctor, nurse, attendants and occupational therapists, the success of the latter to high socialization was attributed to their primary function in that of working with patients in a socializing capacity whereas other workers have many other duties which limit their social effectiveness.

What are we to conclude from the findings of Hyde? For my part, they have established the importance of the specialized or ancillary therapies that are applied in the motivation and socialization of the patient. These techniques applied by personnel with specialized training create a positive and favorable interaction between patient and therapist. The techniques applied have definite significance, the knowledge of

<sup>2</sup>Hyde, R. W.—Factors—Group Motivation in a Mental Hospital—*The Journal of Nervous and Mental Diseases*—Vol. 117, No. 3, March, 1953

which is equally important. The patient is aware of the part you play and the factors you bring forth and apparently looks forward with much anticipation to the opportunity to relate and express himself. Your specialized training serves a distinct purpose in assisting you to introduce the correct media which may meet the needs of the individual patient or the group. The media is your tool. But you as the therapist, utilizing the media, must have that capacity to interact without responding to frustration, fears, guilt or hostility so that you may apply your modality in a friendly, enthusiastic and understanding manner. It is of paramount importance that you understand which activity is tension releasing; which activity will

not be too challenging or competitive for certain patients or groups; and which activity requires a great deal of coordination and skill. The activity chosen and the manner in which it is introduced and applied becomes of equal importance. Your success as a therapist will therefore depend upon you as a person together with your knowledge of the application of your technique to the neuropsychiatric patient and the manner in which you apply your specialty. Hence, to clearly delineate any specific evaluative method in assessing the effectiveness of corrective therapy will depend primarily upon you as a therapist. Knowledge is yours—but to effectively apply that knowledge is in your hands and yours alone.

---

## CRITERIA FOR SOCIAL ADJUSTMENT OF INDIVIDUALS WHO HAVE BEEN HOSPITALIZED BECAUSE OF MENTAL ILLNESS\*

EMILY SCANLAN\*\*

I speak to you today as a social worker, grateful for your kind invitation to address you. You have asked me to discuss the criteria for the social adjustment of individuals who have been hospitalized because of mental illness. No one discipline, however, can claim exclusive knowledge or skill in relation to the social adjustment of human beings. Throughout this paper I shall make my acknowledgement of this more concrete as I refer to other fields, especially to philosophy, psychology, and psychiatry. On the other hand this particular concept, the criteria for the social adjustment of individuals who have been hospitalized because of mental illness, has rarely been specifically dealt with as such in the literature of my field and the several other fields such as psychiatry, psychology, sociology, and anthropology which are concerned with human behavior. However, the fact that standards of adjustment do exist is frequently assumed by implication. Perhaps it is because the social adjustment of those who have been mentally ill is so much the heart of the matter of our work with them that we have avoided being explicit about how to judge it; and with good reason because he who undertakes to set standards of behavior may seem to

make himself more than mortal. Nevertheless, if we approach the task with humility, our attempting it may in itself constitute some small contribution toward improving our service to the men and women who are our patients.

It seems to me inescapable if we are to consider criteria of adjustment, in other words standards of human behavior, that our starting point must be man's nature, what he is essentially. Despite the manifold differences which distinguish each of us from every other man, woman, and child, there exists in every one of us that endowment by which we are unerringly known as human beings by our fellow-men. We are creatures composed of body and soul, matter and spirit, soma and psyche, or whatever terminology you prefer. We are endowed with physical and spiritual powers, substantially interdependent, and often fused in functioning, forming one human being, the self. Through our use of these human powers we experience life, we act as human beings, we seek and find our adjustment to ourselves and to all that exists outside ourselves. In living, moreover, we discover that dichotomy which is the universal experience of mankind, which each one of us knows in his personal life as does each one of our patients. It is the struggle within each man to be independent and at the same time to have meaningful relationships with others; to find a balance between what he wants for himself and what he should give to others; in one of its

\*Presented at Eighth Annual Clinical Conference, Association for Physical and Mental Rehabilitation, Cleveland, June 28-July 2, 1954.

\*\*Chief Social Service, Veterans Administration Hospital, Lyons, N. J.

aspects it is the struggle between good and evil. It is the stuff of life. It is what great literature throughout the ages has been concerned with and it is also, ultimately, what our patients must deal with when they strive to "adjust" after leaving the hospital. Jacques Maritain, the French philosopher, has had this to say about what unites us to each other:

The equality in nature among men consists of their concrete communion in the mystery of the human species; it does not lie in an idea, it is hidden in the heart of the individual and of the concrete, in the roots of the substance of each man. Obscure because residing on the level of substance and its root energies, primordial because it is bound up with the very sources of being, human equality reveals itself, like the nearness of our neighbor, to every one who practices it; indeed it is identical with that proximity of all to each and of each to all. If you treat a man as a man, that is to say if you respect and love the secret he carries within him and the good of which he is capable, to that extent do you make effective in yourself his closeness in nature to and his equality or unity in nature with yourself.

And the English essayist, Gerald Vann, writes about man's independence:

Because unique, he cannot without violence and degradation be regimented or dragooned; because infinite, he cannot be regarded simply as part of the finite world, still less of a finite social system, still less again of an economic structure. . . . In his infinity he overtops the world.<sup>2</sup>

Thus man in his relationships with other men must deal unceasingly with the duality of that in his nature which simultaneously binds him to all other men and which makes him unique and independent. Adjustment means achieving a near balance between the two. For Western man the Graeco-Hebraic-Christian tradition has been the framework within which he has carried on his struggle toward adjustment. It has provided him with a way of life offering full scope for the dignity and creativity which are his and at the same time holding him to a recognition of his contingency and his duties to others. If you had asked me simply to state criteria of social adjustment, my task would be complete if I referred you to those of the Ten Commandments which have to do with our relationships with our fellow-men.

All of us who have worked in mental hospitals know how frequently the term "adjustment" is on our lips and those of our colleagues. "Can this patient probably make a good adjustment?" is the most frequently-recurring question at a disposition staff meeting and "Has this patient made a satisfactory adjustment?" is the question that is expected to be affirmatively answered before a patient on trial visit is discharged. But what do we mean by adjustment? I want here to expand my statement of a moment ago that adjustment is a kind of balance in living.

One thing we know with certainty, a lesson man learned long ago, that we should not involve our patients in the search for a perfect adjustment because such cannot be achieved in this life. Virginia Robinson has written that "Since change is inevitable, the individual is in constant movement and conflict, forever striving for a balance which can never be maintained by living forces."<sup>3</sup> Thus our goal for our patients is not adjustment in the sense that adjustment is so often popularly conceived, " . . . a static world and static personal attributes adapted to that world."<sup>4</sup> Rather we have in mind for each patient as full and satisfying a personal life as is possible for him. Just because it is of the mystery and beauty of human life that each man is unique so it follows that if our patients are to live their own lives, they must live as individuals valuing their own difference. Each patient brings to this process of adjustment his own life experience, his personal interests, values, goals. A way of life that would constitute a fine adjustment for one person might mean a deplorable adjustment for another. There is room for myriad patterns of living within the broad limits of the patient's human nature and of the natures of the community and the family, the primary social groups of which he is a member.

Patients leaving our hospital return to the community and almost always to some form of family living. Because they have been emotionally ill, some patients may tend to avoid any involvement in community or family life; the hope that they can do this and achieve a measure of happiness is almost inevitably ill-founded. The family and the community exist because man needs them. They provide the material and emotional resources for living which he as an individual cannot furnish for himself. From a fairly long experience in working directly or indirectly with patients on trial from our hospital, I have learned that the community asks of the patient leaving a mental hospital what it asks of all other citizens. Dr. Alexander has put it this way:

Every form of social organization requires of its members the capacity to replace to some degree self-interest with an interest in others—in other words, a certain amount of maturity. This is the reason why no society could be run by children or adolescents.<sup>5</sup>

For example, a person living in the community should not attempt physically to harm himself or others; nor should he damage the property of others;

<sup>1</sup>Jacques Maritain, "Human Equality," *Ransoming the Time*, Charles Scribner's Sons, New York, 1946, p. 17.

<sup>2</sup>Gerald Vann, *The Heart of Man*, Longmans, Green & Co., New York, 1945, p. 48.

<sup>3</sup>Virginia P. Robinson, *Supervision in Social Case Work*, University of North Carolina Press, Chapel Hill, 1930, p. 9.

<sup>4</sup>Leonard J. Cohrell, "New Direction for Research on the American Family," *Social Casework*, vol. 34, p. 59.

<sup>5</sup>Franz Alexander, M.D., "The Dynamics of Personality Development," *Social Casework*, Vol. 32, p. 139.

nor interfere with their other important personal rights. By and large, patients leaving mental hospitals meet these standards without difficulty. There is, however, a more subtle demand, made of them, more prevalent in urban communities, that because these men and women have been patients in mental hospitals they bear the burden of the community's apprehension that they *may* trespass on the rights of others. *We are not expected to; they are expected to.* We might say flatly that this is an unreasonable demand for which the community can be held accountable. Whether or not it is reasonable is of little moment; it grows out of the feeling of people about mental illness, the substituting of a stereotype for the reality of the individual patient. One sound approach to this problem is to carry on long range projects intended to help the community understand the true nature of mental illness. Of more immediate value to the individual patient is to offer him help with the problem he feels in the community's attitude toward him as he is anticipating it. Such service is offered him by the caseworker responsible for assisting him with planning for leaving the hospital. Her service includes giving him an opportunity to weigh the optional plans open to him without evading their unpleasant aspects and then to make his own choice, within limits set by the medical staff, as to how he will return to the community.

The return of the patient who has been mentally ill to his family is usually an experience both satisfying and difficult for patient and family alike for deep psychological reasons. Almost immediately the patient feels the impact of a personal demand differing radically from the protected hospital relationships. In the hospital he has felt the interest and concern of the staff centered on him as a patient. The family exists for all its members related most intimately; of its nature it is intended to give love, guidance, and protection to children and to adults the opportunity for personal fulfillment through the giving and receiving of affection and the sharing of responsibility. It rightly expects a contributing to the family's common good on the part of its members, and from its adult members it expects more giving than taking. Our experience shows that the patient returning to his family cannot completely escape carrying his natural role of, for example, father, husband, or adult son. He may not be *able* to carry it but in a psychological sense neither he nor his wife, parents, or siblings will fully excuse him for not carrying it no matter how unconsciously such feeling may operate nor in how distorted a manner it may be expressed. The basic problem, on the other hand, may lie not in the patient's inability or unwillingness to carry his role but in counterpart inadequacies of some other family member which have so disrupted family rela-

tionships as to produce emotional illness in the patient. There is the too-familiar example of the mother who out of her own needs cannot permit her son chronologically an adult to be in reality an adult. Thus desperate conflicts are set up in the patient and in his relatives as individuals and between patient and relatives. If the patient has come to the hospital from an emotionally unhealthy family setting, we cannot with impunity be indifferent to his return to this family. It is because we have learned so well how nearly impossible it is for a patient to make a good adjustment after leaving the hospital if his relatives do not have help in modifying their relationships with him that the Social Service departments of mental hospitals are more and more frequently offering casework help to relatives as well as to patients. I do not intend to convey that a patient should carry more or less responsibility than his relatives demand in relation to his role as a family member. Some patients surely should carry more and some less depending entirely on their genuine capacity. We need to help families to measure their demands by that capacity rather than by some preconceived standard unrelated to the patient as an individual. If a family clearly demonstrates that it is unable to do this, then a significant criterion of the patient's ability to adjust outside the hospital is whether he can choose to separate himself from his family. In such circumstances the hospital can offer the possibility of family care, or the patient may be well enough to live by himself. Family settings can also set much less subtle standards for patients as we have learned from our Family Care Program. A patient asks too much of the usual family if he does not take a bath or change his underwear for many weeks at a time. He asks too much of the homemaker if he sits in her kitchen by the hour talking monotonously about trivialities. He also is jeopardizing his placement if he makes a habit of not appearing for dinner without prior notice. These seem simple things; often they make the difference between a good social adjustment and a poor one, between staying in a home and returning to the hospital. Generally they are symptoms of a deeper disturbance. Nevertheless usually the patient can be helped by the hospital caseworker to face them and do something about them not in order to cure his illness but because he does want to live in a home. We who work with the mentally ill have much to learn from the child welfare field in relation to the use of foster homes. Caseworkers in child welfare agencies have long been aware of the dangers of "over placement," the placing of a child in a foster home with standards of living substantially higher than those to which he has been used. So social workers in mental hospitals need much more experience in judging the "suitable" family care home not by material stand-

ards primarily but by whether it will provide the patient with emotional satisfaction without asking more than he can give in terms of family mores.

Now let us consider the patient's own role in setting standards for how he will live after he leaves the hospital. Granted that he is a human being with the qualities I have already mentioned; he is also a person who has been mentally ill. His experience of mental illness is a part of his very being. To what extent has it reduced his freedom and his ability to be responsible for himself? To what extent can we trust him to know what is good for himself and others? The very structure of the hospital provides the possibility of a solid answer. The hospital as a community gives each patient manifold opportunity to demonstrate the degree of his ability, often newly-acquired through the experience of hospitalization itself, to live responsibly with other people. At our hospital it is expected that a patient will often leave the institution through a graduated process beginning with a privilege card followed by day passes, leaves of absence, and then a trial visit of from three to six months. If the patient is helped to use this process dynamically by the hospital staff, then the process itself constitutes an experience through which he discovers for himself what his real goals are in day-to-day living, whether they conform sufficiently with society's standards, and, if so, to what extent he can achieve them. Here is his concrete opportunity to demonstrate whether his good hospital adjustment can carry over into a good family and community adjustment. For one does not necessarily follow from

the other. The patient must find psychological resources within himself to make possible his moving from the relatively simple hospital environment into our competitive society.

Surely it is not the task of the hospital staff to set standards for the patient; society has already done that. Rather it is for us to help him become as aware as possible of himself as a person who in the last analysis cannot shift responsibility for himself to others. I can testify to the remarkable capacity shown by many of our patients, often long-hospitalized, to plan constructively for themselves when responsibility for doing so is placed squarely with them and skilled help is offered. Nevertheless there are sometimes patients who can be considered for leaving the hospital but who are not well enough to assume sufficient responsibility for themselves. Such responsibility must then be shifted to the relative or other person with whom they will live and must be shared in some way by the hospital during the period of trial visit. The new "day hospitals" are a promising development in this connection. The fact remains, however, that no person or institution can live another person's life for him. Although certain deterrents may be set up, the patient himself, no matter how severe his limitations, will not live other than he in some way chooses to live. Because he is a human being he lives most naturally in the community, the society of free men, to whose standards he must then conform either through accepting the extensive help and protection from others that will make it possible for him to do so or, more healthily, out of his own resources as a person.

### TENTH ANNUAL OBSERVANCE

OCT. 3-9



1954

NATIONAL EMPLOY THE PHYSICALLY HANDICAPPED WEEK

# A NEW FUNCTIONAL DYNAMIC WRIST EXTENSION - FINGER FLEXION HAND SPLINT - A PRELIMINARY REPORT

JOHN G. BISGROVE, M. D.\*

In the rehabilitation of persons with certain neuromuscular disorders, there has been a great need for suitable devices to substitute for loss of normal hand grip or grasp. In the past, lost function has been partly replaced by various static hand splints and implement holders. More recently, some shoulder operated mechanical hand devices have been devised. These devices often work very well on certain individuals. But among the persons with varying patterns of paralysis or paresis, there are ones who make the use of another type of hand device practical. Such a device (Fig. 1 and Fig. 2) has been designed and is being further developed and tested at this hospital.

The new splint was conceived and designed on the theory that wrist extension power can be harnessed for finger flexion; in this case, flexion at the metacarpophalangeal joints. As the wrist is extended from the neutral position, the axis of motion of the metacarpophalangeal joint or a point near this, will approach a fixed point above and near the axis of the wrist. A lever of fixed length, placed along and equal in length to a line connecting these points near the axes of the wrist and the metacarpophalangeal joint, with the wrist in neutral position, will then, become relatively longer as the distance between these two points decreases when the wrist is extended. This relative increase in length can be used to move the fingers by proper mechanical means. It can be seen that when the wrist is extended (Fig. 2) from the neutral position (Fig. 1), flexion at the metacarpophalangeal joints is caused by the force of the action lever, C, on the lever of the terminal device, B.

The essential parts (Fig. 1) of the Splint are: A. The main supporting unit; B. The terminal device; C. The action lever; and D. The thumb support and connecting piece. The main supporting unit is a moulded leather forearm cuff. This is secured with two leather straps, with buckles. The metal reinforcement of the forearm cuff, the terminal device, the action lever, and the thumb support are all cut from flat .063 inch stainless steel stock. They are then shaped to the desired form. The parts, B, C, and

\*Chief, Physical Medicine Rehabilitation Service, Veterans Administration Hospital, West Roxbury, Mass.

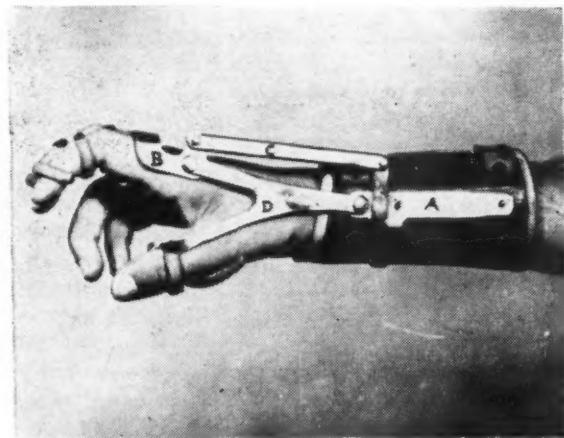


Fig. 1

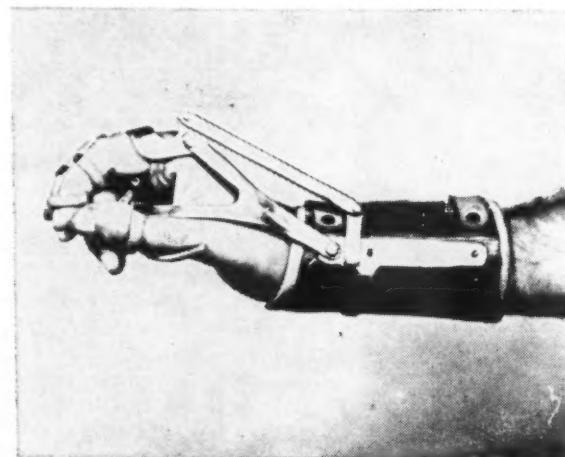


Fig. 2

D are joined by flat-headed stainless steel rivets with shoulders. To soften hard contact areas, the wrap-around finger and thumb supports are covered with soft rubber tubing of suitable size. The form of the

component parts, with a lace leather cuff, are shown in Figure 3.

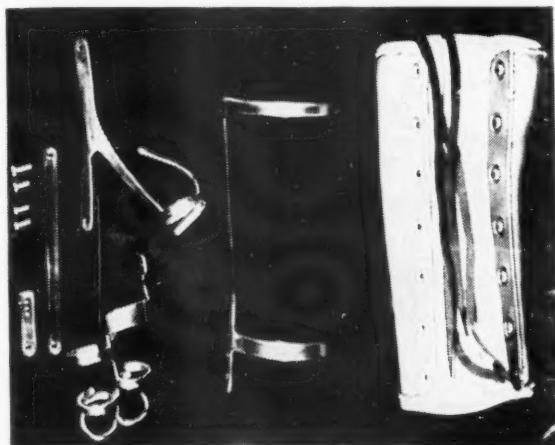


Fig. 3

In the construction of the device, the points of connection or joints between the terminal piece and the connecting piece, and between the connecting piece and the main supporting unit must be carefully centered at the axes of the metacarpophalangeal joints and the wrist joints respectively. The length of the action lever, the length of the lever of the terminal piece, and the point of connection to the main supporting unit can be varied for desired action: for desired range of motion, and for strength of grip desired. The thumb support is constructed to hold the thumb so that the distal palmar pads of thumb and the index contact one another as grasping motion is completed. As much skin surface of the fingers as possible has been left exposed to permit maximum use of tactile sensations. The palm is left completely exposed.

For operation of the splint in its present form, certain voluntary wrist motions are necessary. Some wrist extension strength is essential; this is the action by which grip is accomplished. As with any device holder or static splint, the presence of some useful shoulder, elbow, and forearm strength increase the use of this splint by enabling the user to move the hand from place to place and from object to object.

Voluntary wrist flexion is helpful in opening the hand, but is not essential. Opening can be accomplished by gently flipping the wrist downward by elbow or shoulder motion, or by pushing the wrist into the flexed or neutral position by the other hand, or by pressure against another object such as the other hand, arm of wheelchair, etc.

Many modifications in the form and action of the splint are possible. So far, only the index and middle fingers have been held by the terminal device. Probably the majority of the routine activities of daily living are accomplished by light pinch between the thumb and index, or by thumb and index and middle fingers. The 4th and 5th fingers can easily be included in the terminal piece; or if they interfere with hand use, can easily be supported in a position beside the index and middle finger by a small clip-on anterior support attached to the terminal piece. The action lever can be made to be variable in length, or its attachment to the main supporting unit can be made easily variable to permit varying range of motion, varying position of grip closure, or to permit the hand to remain open for wheelchair pushing.

Several variations of action are possible. Opening of the hand can be done by wrist extension if the lever of the terminal piece, to which the action lever is attached, is made to extend downward (anteriorly) from the metacarpophalangeal joint. Closure or opening can be assisted by spring or rubber band tension. To date, stainless steel has been used because of its strength, but some of the new light metal alloys would be about as sturdy and would appreciably reduce the weight of the device.

Many thanks are due the orthopedic technician<sup>1</sup> of the Orthopedic Shop of this hospital for his technical advice and construction of the device.

#### SUMMARY

1. A new dynamic hand splint has been described.
2. It is light, easily constructed, easily modified for individual needs, and is functional in its action.

<sup>1</sup>Bruno T. Tassinari, Orthopedic Technician, Orthopedic Shop, VA Hospital, West Roxbury, Massachusetts.

# A SHOWER CHAIR FOR DISABLED PATIENTS

WILLIAM A. CLARK\*

I. B. HOPSON, SR.\*

In the various areas of rehabilitation therapy, it is occasionally necessary to invent new equipment and new uses for old equipment. This paper discusses and illustrates a successful application of improvised fabrication in providing a shower chair for patients on a Rehabilitation Ward.

trials and errors a very satisfactory chair was produced. (Fig. 2)

Fabrication of the shower chair was done by patients participating in the Welding Course, Manual Arts Therapy Section, as a learning project. This included drawings for the blue print, related machine shop and



Fig. 1



Fig. 2

**Before and After.** The discarded commode chair at left was reconstructed for use on the rehabilitation ward.

The chair described here originated in a request from the ward physician on the Rehabilitation Ward to procure a metal shower chair to replace a heavy wood chair that had been in use to seat seriously disabled patients under the shower. Search of hospital supply catalogs and discussion with representative of hospital supply manufacturers failed to turn up such a piece of equipment. A discarded commode chair (Fig. 1) provided the solution to the problem. This was sent to the Manual Arts Therapy welding shop with some penciled drawings and oral instructions for fabrication of the type chair needed. After several

sheet metal work, welding and finish of the product.

## CONSTRUCTION

1. The commode chair legs were sawed off 2" from seat base and the commode seat removed.

2. A new base frame was constructed from two pieces of  $\frac{1}{2}$ " water pipe bent in bow shape to form the new base. These were joined at the top by two cross pieces 12" long, and at bottom by two pieces 15" long to give side-spread support to prevent toppling. The commode chair frame was then welded to this base frame. (See detail of frame and seat parts in Fig. 3)

3. The seat was formed from sheet steel 26" x 20" x  $\frac{1}{8}$ ". Corners and edges were turned and smoothed.

\*Executive Assistant and Manual Arts Therapist respectively, Veterans Administration Hospital, Tuskegee, Alabama.

The back of the seat was made 6" high to prevent possible pinching.

4. Four studs  $\frac{3}{8}$ " x 5" were welded to the under side of the seat. Over these studs 1" x 4" springs were placed and studs secured through the commode frame by nuts.

5. Ordinary hospital bed lock casters were fitted to the chair, and pipe handles were welded to the back of chair on which were fitted wheel chair handgrips.

6. Bronze welding was used in fabrication and chair was finished with waterproof enamel.

#### USE

This chair has proved its use value for all types of wheel chair patients who are so disabled they can not manage themselves in the shower. Aides transfer the patient from wheel chair to shower chair and roll him in place in shower room. Those patients who have

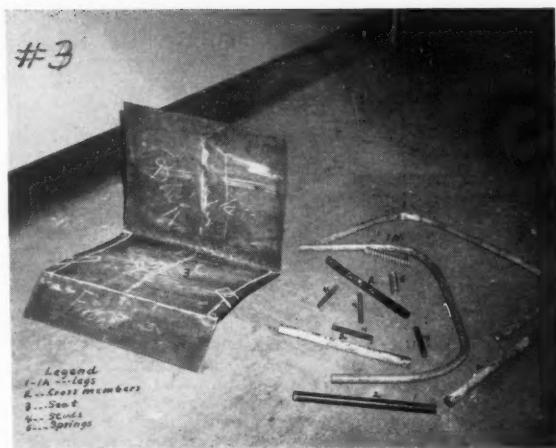


Fig. 3

use of hands or hand can complete their shower without further assistance of aides. The chair is comfortable, easy to keep clean, and easy to move.

---

## WE INTRODUCE

DR. CECIL MORGAN



Because the education and training of the corrective therapist is one of the most vital problems concerning the Association for Physical and Mental Rehabilitation, directors of rehabilitation in the various colleges and universities offering this major are necessarily invaluable members of the "CT team."

An important center for training therapists is

Springfield College, one of the oldest and best-known colleges of physical education in this country, which offers a specialized program in rehabilitation in its graduate curriculum including clinical training through an affiliation with the Veterans Administration. Director of the Springfield program is personable, efficient Dr. Cecil Morgan, Professor of Physical Education, who was appointed to his present position after several years of outstanding administrative work as a Lieutenant-Colonel in the U.S. Army's vast reconditioning program.

Dr. Morgan, a native of New Castle, Pa. was graduated from Springfield in 1927 and taught physical education for several years in the high schools of New Castle, Greenville, and Mt. Lebanon, Pa., and at the Univ. of Pittsburgh. He received his M.Ed. degree from the latter in 1941 and later earned his Ph.D. from New York University. After coming to Springfield in January of this year, Dr. Morgan was selected by the Veterans Administration as Consultant in Corrective Therapy, a position he will fill on an on-call capacity for advice and evaluation of the specialty in the agency's 170 hospitals.

## "From Other Journals"

RAPHAEL GINZBERG, M.D., "Geriatric Ward Psychiatry," *The American Journal of Psychiatry*, 110:296-300, Oct. 1953.

In about one-third of the institutional elderly mental patients the psychosis started in the older years. Cerebro-vascular pathology is predominantly responsible for the occurrence of this type of psychosis in senescence. The intensity of an elderly individual's emotion is often strong and spontaneous, although abrupt, disorganized and not always adequate. Patients may have fantastic requests. In the past these desires were not taken seriously and the patient had to learn to comply and align himself to the ward routine. If the resistant individual is forced to act in a way he resents, his attitude will be more aggressive toward his environment. The elderly person is looking for acceptance, appreciation, respect, warmth and devotion. The knowledge of patient's habits and ambitions frequently gives unexpected opportunities to relieve his anxieties, his resistance, and his opposition. Too much interest, however, might be rejected by the patient as well as too little. How one talks or listens to the patient is of importance. There frequently exists the feeling of belonging to a group. Ward activities are done not so much through an understanding of the necessity to be active as it is the desire to be as the others are. This is especially true under circumstances in which the patients are encouraged and when they feel that their efforts are appreciated. An attempt is being made at Tomah to develop an approach on these concepts. Those who become more accessible and with whom a better personal contact is established are ready for group psychotherapy and individual psychotherapy. **JT**

ARPAD PAUNCZ, "Theory of the 'Total Push' Program in Psychiatry," *American Journal of Psychotherapy*, VIII:11-20, January, 1954.

In the "total push" program patients are not "pushed around"; they are given more attention and treatment. The hospital is for the patient. The philosophy of the total push concept tries to understand the patient from the point of view of pathology as manifested in his behavior and interpersonal contact. It is expected that even the normal individual is pathological to some extent. No matter how deteriorated, a patient is "normal" in a restricted sense; with the "still healthy" aspect of his personality the patient retains his striving for survival. He can still react to his environment. Since patients retain a sense of responsibility, activities assigned to them must be meaningful and properly motivated. They may display many child-like manifestations, but they never really become a child again. In spite of the most severe psychiatric pathology, each patient retains some aspects of human dignity. Therapists must possess a recognition of the patient's inherent worth, faith in his capacity for reconstruction, ability to mobilize their own facilities to stimulate patients, satisfaction from job accomplishment and an attitude of therapeutic hopefulness. **PJR**

NATHAN FLAXMAN, "How to Keep Up with Medical Literature," *Journal of the American Medical Association*, 154:1409-1410, April 24, 1954.

One of the commonest complaints of physicians is their difficulty in keeping up with medical literature. In the English language alone some 400 medical journals are listed in the Quarterly Cumulative Index. The best guide to current journals is the Medical Literature Abstracts section of the *Journal of the American Medical Association*. Check the abstracts that hold special appeal and borrow the journals from a local medical library. As soon as the desired journal is obtained, scan the article. If still interested,

write the authors for reprints. By adopting a single field or subject as a primary interest, interest in medical literature may be sustained and maintained. **PJR**

JOHN T. LOQUE, "Acrylic Cast for Baseball Finger," *U.S. Armed Forces Medical Journal*, V:757-758, May, 1954.

Avulsion of the extensor tendon from its insertion on the distal phalanx results in the so-called baseball finger. Proper healing depends on six weeks immobilization of the finger in the proper anatomic and physiologic position. Adequate relaxation of the extensor tendon can only be obtained by maintaining the proximal inter-phalangeal joint at about 60 degrees of flexion while the distal inter-phalangeal joint is in hyperextension. Use of splints or plaster casts involves constant care to prevent slipping. An acrylic resin splint is convenient, comfortable and efficient. **PJR**

"Sporting Life Spans," *CANADIAN MEDICAL ASSOCIATION JOURNAL*, 70:579, May, 1954.

Little has been published on the period of time during which athletes may expect to give first-rate performance and the reasons which compel their retirement from competition. A publication from Kyushu University, Japan, analyzed the sporting lives of 4846 persons. Japanese fencers can count on 52 years of participation; jockeys, 22; baseball players, 18; table tennis players, 16; swimmers, 8.7; field athletes, 8. Decline in physical fitness stopped the careers of the majority of wrestlers and jockeys. Actual disease stopped the activities of most fencers, who were well advanced in years by then. Disease caused 20% of athletes to abandon competition; of those about 40% contracted tb. Injury ended 22% of the cycling careers and 9.6% of the rugby careers, but did not affect wrestlers very much. **PJR**

E. PEREIRA-D'OLIVERIA, "Asthma," *De Syllabus R. V. U.*, February 18, 1954. No. 7.

Asthma patients experience difficulty in getting air to and from the alveoli through the narrowed smallest branches of the air channels. The sufferers may get relief from a splash of cold water immediately after taking a tepid shower, as the resulting deep inspiration loosens and facilitates removal of the mucus in these channels. Asthmatic children often seek relief from these attacks by spending time in mountain areas on the principle that the mountain atmosphere is free of irritants. Frequently, however, they have asthmatic attacks just prior to returning home. At a convalescent home in Hilversum, Netherlands, established by Action for the Asthmatic Child 50% of the children are free of asthmatic attacks, 30% show considerable improvement, and 20% show a slight improvement. In the program the children are treated as normal. They engage in bicycle riding and other sports. There are group therapy sessions during which insight into the asthma difficulties is stressed. There are no particular medicines to take nor any special diets to follow. Of importance are the exercises in proper breathing which are carried out on a daily basis in small groups. Results are explained on the basis of a change of milieu for the children, absence of family pressure, homogeneous grouping and relief from feelings of inferiority if such existed at home. Group therapy sessions are now being performed also with adult asthma sufferers with encouraging results.

(Translated and abstracted by **JT**)

MERVYN G. HARDINGE and FREDERICK J. STARE, "Nutritional Studies of Vegetarians," *The Journal of Clinical Nutrition*, 2:73-88, March-April, 1954.

Groups of non-vegetarians, lacto-ovo-vegetarians (individuals not using meat but using milk and eggs) and pure vegetarians were compared. The mean weight of the pure vegetarians was 20 lbs. less than that of the other two groups. In general blood pressure and hematological findings were not statistically different. **PJR**

# Editorials

## CORRECTIVE THERAPY IN THE PSYCHIATRIC HOSPITAL

It is most doubtful if the transition from the asylum of yesterday to the large psychiatric hospital of today could have occurred had administrators been unwilling to accept the daily supervised activity program as a vital part of hospital treatment. The successful hospital community has been realized in many instances through provision, not only for good medical and nursing care but also for a continuous program of activities within the protective environment of the hospital wherein the patient can function at a level commensurate with his illness. This generalized concept applies to both the acutely-ill mental patient who is gradually recovering under the aegis of intensive psychiatric treatment and for whom the hospital environment is but transitory and to the patient whose psychosis is so deeply rooted that the hospital represents the only milieu in which he can survive and function.

Within this general framework of activity corrective therapists have gradually evolved programs for patients under medical guidance on various levels of mental illness using many of the tools of physical education as a media for individual and group participation. The rationale for the use of play, exercise, adapted sports and games as a means of communication in which the patient can express himself in very basic terms has been the subject of several articles in these pages.

The corrective therapist has also concerned himself with more definitive types of treatment. Historically, activities for therapeutic purposes were prescribed primarily to combat certain symptoms or tendencies of the patient and the corrective therapist has had considerable success in this area, notably with the disturbed patient who is able to displace his hostility by punching the heavy bag or achieving sedation through swimming exercises and activities under proper conditions of water temperature. Where corrective therapy has been able to lessen the need for packs, tubs, and artificial restraints, a grave management problem of psychiatric hospitals has been alleviated.

Although the therapist continues to examine the merits of specific activities for the accomplishment of certain prescribed objectives, many authorities of today believe that the success of the activity therapist is contingent upon his ability to relate with patients, to develop rapport, to make the patient feel that he is accepted and thereby increase his ability to socialize and to be amenable to standard psychotherapeutic

processes. The success of the therapist in this area of inter-personal relationships implies the unique personality requirements which are needed in such a position.

Although the field of corrective therapy has contributed considerably to an expanded program for the modern psychiatric hospital, there has become evidenced a concomitant need to more fully evaluate the dynamic processes involved in activity itself; to explore techniques in inter-personal relationships; to develop methods of measuring objectively specific programs in corrective therapy. Although some of these needs may be solved by researchers in the general psychiatric field, the major responsibility for these advances rests within the profession itself.

## ADVERTISING SURVEY

Included in this issue of the journal is a postal card addressed for your convenience to the advertising manager of the journal. The questions which you are asked to answer are in connection with a survey of considerable importance to the journal. Please co-operate by filling out the card and returning it as quickly as possible.

## NEPH WEEK

Those of us who spend the major part of our working day instructing and guiding the physically handicapped in matters of mobility or function are primarily concerned with ways and means whereby our patients can achieve physical independence. We sometimes become so concerned with the question of *how to* in the motivation and progression of our patients through the various stages necessary for their rehabilitation that we lose sight of the *where to* which is inevitably the primary concern of the disabled.

Although the organization of rehabilitation services is such as to assign the teaching of vocational skills, problems of counselling, and social welfare to specialists in these areas, the employment of the physically handicapped is of vital importance to all therapists because of the motivational impetus and the moral responsibilities involved.

NEPH Week is designed to draw the attention of employers and citizens alike to the national responsibility for providing an opportunity for the handicapped to demonstrate their abilities and earn their livelihood on the same basis as other workers. That they can do this is an established fact, but further and continuous efforts are necessary for public interest to

be maintained. One of the groups foremost in publicizing and promoting jobs for the disabled is the President's Committee on Employment of the Physically Handicapped which is now organized on a national basis with committees in every state attempting to keep this problem alive on the community level. How all therapists can contribute by joining in these and similar community efforts and accepting assignments as speakers to local groups or accepting jobs on organized projects is readily apparent and it is suggested that our chapters undertake steps to contact local or state committees to find out how representatives of our organization can best contribute to a cause which in reality is not confined to a single week in October but to fifty-two weeks a year of united effort.

## Research

### RESEARCH: AN INTEGRAL PART OF CORRECTIVE THERAPY

There is no doubt that Corrective Therapists, through their experiences, technical knowledge, and training are in an advantageous position to make definite contributions to medical science, through their preparations of scientific papers for publication.

As Chairman of the Research Committee, I make an urgent plea to all Corrective Therapists to strive for the completion of at least *one* research project during the current year, with the ultimate aim of presenting a scientific paper for publication in the Journal.

Each and every day, patients treated in Corrective Therapy Clinics, present problems that should motivate therapists to initiate a research project. We must be constantly alert to grasp the opportunity of conveying to medical science the approaches, techniques, devices, etc., employed in the Corrective Therapy treatment of patients.

Many therapists find the most difficult part of writing a scientific paper is in getting started. Alibis for delay are innumerable and they finally come up with the excuse that is paramount: lack of time. For those who have found time and eventually seated themselves with paper and pencil in hand, the shock is not too great. If each therapist will compose a rough draft of a constructive idea, allowing faults and mistakes to creep in where they may and await the completion before corrections are made, I am sure the end result will be an abundance of good, sound, scientific papers for publication.

Some of the numerous areas of research that warrant exploration by Corrective Therapists are:

1. Orthopedics—Ambulation and gait training; exercise techniques for the orthopedically handicapped.
2. Cardiacs—Tolerance testing; conditioning exercises for all classes.
3. Neurologicals—Specific contributions can be made in daily activities testing and training; gait training; exercise techniques for patients with polio, brain and spinal cord injuries, multiple sclerosis, cerebral palsy, muscular dystrophy, etc.
4. Diabetics—Tolerance testing; specific exercises for the regulation of drug therapy for hospitalized patients with diabetes mellitus.
5. Surgicals—Pre—and post surgical exercises for prevention of post surgical complications. Early ambulation following surgery with ultimate rapid discharge from the hospital.
6. Neuropsychiatry—Opportunities for research are innumerable in the Corrective Therapy treatment of Neuropsychiatric patients. Techniques employed; methods of approach; socialization; types of motivation; hydrogymnastics; etc., are subjects that should be given consideration.
7. Tuberculosis—Tolerance testing and conditioning exercise program for tuberculosis patients, Classes IV to VII inclusive.
8. Geriatrics—This is one of the most acute problems facing medical science and society. Research should be centered about the daily activity routine; exercises to prevent debility; and socialization of these patients.

As an incentive to stimulate the writing of scientific papers, the Association for Physical and Mental Rehabilitation will award, each year, a total of two hundred and fifty dollars for the five best papers prepared in diversified areas. Papers will be evaluated by leaders in the field of specialization covered by the various topics.

The Chairman, Research Committee, would appreciate information from therapists regarding the following:

- A. What Corrective Therapy research project is now underway in your hospital or clinic? By whom was it initiated and conducted?
- B. Are you planning a research project this year? If so, what is the title and type of study? What will be the approximate completion date?
- C. Do you need specific help toward the completion of a project?

Please address all inquiries and information to:

JOSEPH J. PHILLIPS  
1011 Sixth Avenue  
Leavenworth, Kansas

# EXPERIMENTAL WORK IN ANKYLOSING SPONDYLITIS

(Editor's Note): This is the last in a series of three summaries concerning Czech research on spondylitis.

## COMPLEX SPA TREATMENT— OF MORBUS BECHTEREV (Experimental Work No. 3)

by

P. Truhlar, M.D., Prof. Frant. Lenoch, M.D.,  
Z. Polakova, M.D., Z. Hajkova, M.D.,  
G. Horvath, M.D., L. Kadlecova, M.D.,  
V. Kralik, M.D., J. Kvacek, M.D., S. Popelka, M.D.,  
Prof. L. T. V. L. Nechvatalova,  
Prof. L. T. V. V. Paurova and  
Prof. L. T. V. M. Zamostna

### SUMMARY

The second experimental work on the effect of complex spa treatment of spondylarthritis ankylopoetica in the sulphur baths of Trencianske Teplice is evaluated. Sixty patients in the 2nd to 5th stages of the disease were treated in two four-weekly courses of 30 patients each. In their therapeutic programme amongst the other components of complex therapy, remedial exercise was stressed.

The therapeutic plan included: on the first day, thermal bath in the pool above the fountain, lasting 15-40 minutes. During the first week baths were taken in the pool P II at a temperature of 36.8°, in the 2nd and 3rd week in pool P I at a temperature of 39° C, and the last week in pool Sina at 42° C. After the baths passive exercises were carried out on the spine and root joints by methods worked out by the authors. The exercise was individualized and carried out 12 minutes, always by two health workers. After the passive exercise, a five-minute bath followed and then positioning in dry towels for 30 minutes. During this procedure faulty postures of the spine and joints were corrected by means of sandbags. After a two-hour rest, active exercise, lasting 30 minutes, took place in the gymnasium. Afterwards, warm jets were directed at the spine from a distance of 2.5. m to maintain

relaxation of the soft tissues. In the afternoon following a 1-1½ hours rest, various sports were practiced (volleyball, rowing, skittles, table-tennis and various competitive games). Bathing in natural pools or showers were not permitted. At 6 p.m. a medical round in clinical style took place, during which individual changes could be made in the programme. The following day sulphur mud was plastered onto the spine and affected joints at a rising temperature of 42°-44° C., for 10-20 mins. After a rinsing warm shower passive exercise with positioning was carried out (vide supra). On this day there were no active exercises but the afternoon programme was identical with that of the previous day.

Doctors and nurses were in constant touch with the patients. Throughout the day they carried out the treatment measures and participated in games and common ground walks. This was arranged in an effort to create a pleasant social environment and to supplement the treatment by psychological action.

The examination of the patients was carried out as it was during the first experimental treatment in 1951. The results and evaluation are shown in the tables.

Some of the tests improved by 50-70%. It was found that even in very advanced cases a certain degree of the stiffness was due to fibrous and muscular changes, amenable to spa treatment. At reexaminations half a year later the improvements were maintained.

During treatment, 4 cases of iritis made their appearance which did not necessitate interruption of the treatment. Subsidiary ailment occurred twice (nephrolithiasis and jaundice). The patients were given analgesics according to need, exceptionally (sic) Irgapyrine and in 10 patients additional physiotherapy was used. As in the first experiment, here too it was shown that in the treatment of Bechterev's disease, complex spa treatment gives, by objective tests, better results than ordinary spa treatment.

ACTA CHIRURGIAE ORTHOPAEDICAE ET TRAUMATOLOGIAE CECHOSLOVACA, ANNUS XX./IV, No. 8, 1953, pp. 182-183.

## Advertising Survey

PLEASE FILL OUT POSTAL CARD ENCLOSED WITH  
THIS ISSUE OF THE JOURNAL AND RETURN IT  
PROMPTLY

## Book Reviews

**"Tests and Measurements in Health and Physical Education," by Charles Harold McCloy and Norma Dorothy Young, 3d Edition (New York: Appleton-Century-Crofts, Inc., 1954. 497 pp. \$6.75).**

It is a pleasure to welcome the long-awaited revision of Dr. McCloy's text on physical education tests and measurements. With Miss Young as co-author, Dr. McCloy has produced what is for all practical purposes an entirely new book. The authors tell us that fifteen chapters are new or completely rewritten and most of the others have received extensive revisions. The material has been completely rearranged. The book is divided into six general sections: Introduction, Methodology, Motor Capacity, Present Status, Health and Practical Considerations. These are followed by two appendices, one devoted to a concise and clear explanation of statistical methods and the other to suggested laboratory exercises. A Selected Bibliography completes the text. Among the new chapters are those on tests of potentiality for different sports, applied anthropometry and the basic factors underlying testing in this field. Certain tests, such as the Barringer and the Karpovich Step Test, are noted as being "useful primarily in programs of corrective therapy . . ." In some instances a few words of explanation and an illustration would have been helpful; it is conceivable that there will be readers who are unfamiliar with a flarimeter, for instance. The chapter on strength testing will suggest to the reader that there is a need for correlation of dynamometer scores in such a way that they are meaningful in terms of actual weight which an individual can handle in standard lifts. Mention is made of a 142 lb. adult whose arm strength by dynamometer tested at 632 lbs. One wonders how much he could press and curl. It would, perhaps, be well to suggest that the reader does not skip the footnotes. Some words of wisdom on such subjects as the effect of tradition on scientific procedures and the importance of essay type examinations will be found in them. The revision is so extensive that no one owning the Second Edition should hesitate to purchase the new one. It is highly recommended to anyone working with or needing a knowledge of tests and measurements in physical education and health.

PJR

**"The Psychology and Psychotherapy of Otto Rank," by Fay B. Karpf (New York: Philosophical Library, 1953. 129 pp. \$3.00).**

Of all Freud's pupils, writes Miss Karpf, Otto Rank was perhaps the most brilliant; of them all his viewpoint is the one which appears to best fit the traditional pattern of American culture. The whole field of "client-centered" or "non-directive" therapy, is, she writes, a development of his ideas. To make available to teachers and students a summary of his thinking, Miss Karpf, herself associated with Rank over a period of years, has written this manual. Chapters devoted to Freud, Jung and Adler establish the background so that Rankian thought may be seen in proper perspective. Unlike Jung and Adler, Rank never dissociated himself from Freudian theory. He considered much of it naive, over-simplified, misleading and authoritarian, but his own work was the development, modification or shifting of emphasis in certain phases of the theoretical structure of psychoanalysis. In time outside pressure forced a break between Freud and Rank, but the two men never lost their respect and admiration for each other. Miss Karpf's book is clear and concise. It is definitely recommended to all non-professional readers, who will find it a lucid introduction to the thought of a man who was one of the leaders in modern psychiatry and whose work has been especially fruitful in our own country.

PJR

**"Films in Psychiatry, Psychology and Mental Health," by A. Nichtenhauser, Marie Coleman and David Ruhe (New York: Health Education Council, 1953. 257 pp. \$5.00).**

"The best laid plans of mice and men oft times go astray." This statement may well apply to those harassed individuals who have rented or borrowed a psychiatric film for training session only to have the film fail miserably in its purpose. The objective of this textbook, "Films in Psychiatry, Psychology and Mental Health" is to reduce the incidence of such "film jitters," a common occupational disease among users of unreviewed, psychiatric films.

With the rental fee of such films running from \$3.00 to \$10.00 a day, the previewing of psychiatric films becomes prohibitive. This text book fills a real need for anyone using psychiatric films in hospitals, in the community, and in teaching programs of the universities.

Fifty-one films of psychiatry, psychology and mental health are comprehensively previewed under the direction of the Medical Audio-Visual Institute of the Association of American Medical Colleges. A quick and easy table for selecting films appropriate for the many different types of audience appears twice—on the inside of the front cover as well as the back cover.

Of particular interest to Corrective Therapists will be the provocative review of the VA motion picture "Activity for Schizophrenia: Technique for Corrective Therapy." The criticism of the psychiatric accuracy of the film may be justified but not the loose substitution of the term "occupational therapy" for "corrective therapy."

While it is unfortunate that Dr. Cornelison has so loosely used his references to corrective therapy, the book itself is a splendid and welcomed addition to the army of harassed people who are responsible for utilizing psychiatric films in training programs.

BMR

**"Personality Through Perception," by H. A. Witkin and Associates (New York: Harper and Bros., 1953. 571 pp. \$7.50).**

The value to medical therapists of this important book is two fold: first, it demonstrates how various specialties (six different psychology specialists in this case) can be integrated toward a common research goal, and second, it represents an outstanding example of bringing together laboratory methods and clinical techniques. The problem was the investigation of visual-spatial orientation and its relationship to personality. The writers have attempted to show that what an individual perceives (or fails to perceive) and the nature of the perception are rooted in the psychological organization of the percept. Dependent and independent persons perceive things differently, as do men and women, the latter tending to depend more on the visual framework and less on bodily sensation. An attempt is made to correlate this with contemporary psychoanalytic speculation.

RSM

**"The Technique of Psychotherapy," by Lewis R. Wolberg (New York: Grune & Stratton, 1954. 869 pp. \$14.75).**

There is a school of thought in neuropsychiatric hospital work which holds that every therapist should be able to conduct at least superficial psychotherapy with his patients. One difficulty is that there is almost nothing in print which tells him how to actually conduct such sessions, what to say when the patient expresses great hostility toward his doctor, how much interpreting one should attempt, what to do when a patient threatens to commit suicide or demonstrates some other unacceptable behavior, etc. This text has been written precisely to fill this gap. It is by far the most complete book of its type the reviewer has seen. Starting with a definition of psychotherapy and a consideration of the various schools of therapy, the text takes up the therapeutic process step by step. Some idea of the thorough manner in which the material is covered may be seen from the fact that 481 references are listed, in addition to recommended readings. Only professional psychotherapists would care to purchase such an expensive and detailed text. It is likely that readers of this journal who are confronted with difficulties in their psychotherapeutic relationships with patients will prefer to consult it in some convenient library. They will find it well worth the trouble.

PJR

"Second Progress Report, Nationwide Study of Prolonged Illness," Part I and Part II (Chicago: Research Council for Economic Security, 1954. Part I, 20 pp; Part II, 59 pp.).

The above reports are concerned with prolonged absences in industry due to non-occupational disabilities. Part I is a study of the incident and duration of absenteeism during 1952 among 22,778 employees. It is anticipated that this study will be beneficial to the medical profession in regards to kinds of illnesses causing prolonged absences; to the community, it is felt that the report will aid in developing proper and adequate facilities; and it will greatly facilitate needed information for commercial insurance companies and prepaid medical plans.

Part II analyzes the nature and cost of non-occupational disabilities for a group of 1212 prolonged absences during 1952-53. An extensive statistical analysis of the disease entities and medical costs are included as part of this section. An interesting example as shown through the statistics is that the greatest number of prolonged absences were diseases under the category of the Digestive System, although the group with the highest average duration of more than eight weeks was the diseases of the Circulatory System.

As regards to the rehabilitation therapist, the information collected through these studies are probably good measuring sticks for depicting the types and population of patients that we may expect to work with in our rehabilitation centers in the present future.

HJB

"The Reluctant Healer," by William J. MacMillan (New York: Thomas Y. Crowell Co., 1952. 243 pp. \$3.50).

This is certainly one of the most unusual and fascinating autobiographies that the reviewer has ever read. In 1933 Mr. MacMillan was in his last year at an Episcopalian seminary. Chancing to encounter a medium at a dinner party, he was amazed when the seer suddenly informed him, "You are a healer." He was dismayed when his hostess, suffering from a sinus attack, insisted that he treat her immediately, and bewildered when his treatment was successful. When others demanded his ministrations, Mr. MacMillan consulted physicians, church authorities, spiritualists and others whom he thought might understand his emotional disturbance and advise him as to what should be done. For their own reasons, each refused the help which he sought. Finally the author found it necessary to leave the seminary and be licensed in England as a "psychotherapist." The "Reluctant Healer" thus entered upon a life of constant conflict between his desire to escape from this undesired vocation and his inability to act contrary to intuitions which he believes were inspired directly from Heaven. Mr. MacMillan is both sensitive and sincere. His frank confessions of how sorry he felt for himself and the many mistakes he made never becomes maudlin, while a wonderful sense of irony adds paragraphs of refreshing humor. Through it all runs a distinct feeling of disillusion over the lack of Christianity in our alleged Christian culture. The last pages hint that further autobiographical work will be forthcoming. If so, it will be welcome. In its field the present volume is perhaps the most touching since *The Story of San Michel*.

PJR

"Overcoming Back Trouble," by Helen Jeanne Thompson (New York: Prentice-Hall, Inc., 1953. 214 pp. \$3.95).

The author describes herself as a corrective therapist who has been impressed by the almost universal occurrence of backache. The basic theme of the book, she says, is the need for strong muscles, but she wanders off into such fields as the glands, nervous system illnesses, and tumors. The text is designed for the popular audience, and, as with most popularizations, it contains many statements to which exception might be taken. To speak without qualification of the ease of injuring the sacroiliac is to ignore the views of Thompson, Barr, Marble and other authorities, who hold that such injuries are rare, the lumbrosacral junction being the weak spot. One questions why an exercise done lying on the back should be called "the prone press." A definition of "isometric exercise" as "muscle-setting or muscle-control exercise" is not likely to be useful to the gen-

eral reader. Certainly it is incorrect to say that Ling devised calisthenics "to teach agility." Miss Thompson's answer to backache is graduated (why not progressive?) resistance exercises. She recommends use of a mop handle or broomstick to each end of which are attached baskets or buckets filled with canned foods. As those who have tried using buckets of sand for weight know, this type of equipment is extremely awkward to handle and hardly seems desirable for patients with back troubles. There is no bibliography, although a "Glossary of Back Trouble Terms," which includes such words as anti-histamine, encephalitis, stilboestrol and tennis-elbow, and an index are included.

PJR

"The Conception of Disease, its History, its Versions and its Nature," by Walther Riese (New York: Philosophical Library, 1953. 99 pp. plus appendix, \$3.75).

Dr. Riese is a philosopher and a thorough appreciation of this analysis of the conception of disease requires a broad background in philosophy and ancient history. Fairly complete, concise footnoting assists the reader where limited understanding in these areas exists.

The anthropological, moral, philosophical, artistic and scientific approaches to the understanding of disease are elaborated. The origins, implications and justifications of each historical approach are discussed. The modern use and the limitations of the various conceptions of disease are a revelation to the student of medical science. Of particular interest is the chapter regarding the moral genesis of disease—the ancient belief in sin as the cause of man's suffering is equated with the psychoanalytic concepts of guilt and self-punishment.

In ninety-nine pages Dr. Riese covers such subjects as the comparison of the philosophies of Freud and Rousseau, Leonardo da Vinci's contributions to the anatomical conception of disease, the holistic approach of Hippocrates, the cosmology of Plato, etc. With real insight he discusses art as a product of health and disease. Such artists as Goethe, Nietzsche, Van Gogh, Mozart, Chopin, and Bizet are briefly discussed.

The drama of medicine and man's search to understand his ills unfolds and the reader becomes aware that today's conception of disease increasingly combines much from each previous period of civilization.

GT

"Psychoneurotic Art," by Margaret Naumburg (New York: Grune & Stratton, 1953. 148 pp. \$6.75).

Once again the rapidly growing literature of art therapy is enriched with a significant contribution by Miss Naumburg.

The volume presents clearly the analytic history of a young woman whose thirty-four months in art therapy with the author resulted in a solution of her three major areas of conflict. The dynamic changes in the patient's orientation, extending from a severely incapacitating compulsion to the comfortable ground of an accepted reality principle, are strikingly apparent in the dramatic illustrative material.

Although not specifically directed toward a lay public, the text veers away from excessive psychiatric terminology and emerges at a level that may well include the interested general reader. Advantageously incorporated into the text is correlative material of a psychological nature as well as definitive information relative to the various level at which art therapy can function, emphasis being placed on analytic procedures.

In conclusion, Miss Naumburg presents a valuable bibliography of related subject matter and a historic review of art therapy. The volume as a whole should serve to stimulate those already interested and simultaneously open a provocative area of inquiry into a subject which merits further investigation.

IF

"The Psychology of Personality," by Bernard Notcutt (New York: Philosophical Library, 1953. 259 pp. \$4.75).

Dr. Notcutt states that his book "proposes to give an account of current knowledge about personality; to de-

scribe the ideas used by psychologists in this field; the techniques available, the results obtained, and some of their applications." He has adopted the rather unusual expedient of offering three sets of references: one at the end of each chapter; "essential references," suitable for the general reader; and "general references," which include a wider range. He divides theories of personality into three main groups: Trait theories, environmental theories and interaction theories, passing from them to a consideration of such subjects as psychodynamics, projective methods, group interaction, etc. It is a little difficult to determine the audience at which this is directed. The extensive references would certainly be useful to the student, but the work does not appear to be designed as a text book. There are no case studies, ideas of the various authorities are not expressed in sufficient detail to be helpful to the professional worker, and the work of the experimental psychologists does not seem to receive an appropriate amount of attention. It is in nature reminiscent of Joad's *Guide to Modern Thought*, and perhaps its greatest usefulness will be as a convenient and well written aid for those who desire a similar guide to modern theories of personality.

PJR

## ATTENTION ALL CHAPTER PRESIDENTS

"Rehabilitation belongs to the people; they should be kept informed of what is going on—"

N. R. Howard  
Editor, Cleveland News

Publicize your chapter meetings. Invite reporters from your local newspapers. Tell them what Corrective Therapy is—what we do.

Arrange for talks before such groups as the Rotary, Kiwanis, Elks, Church groups, Ladies' clubs, etc.

Talk to your High School students on their Vocational Days.

Contact Director of Nursing Education in your hospital about orientation of graduate nurses in Corrective Therapy.

We are establishing a file of newspaper clippings. WILL YOURS BE INCLUDED? Send them to—

JOHN F. CULLINAN  
Chairman, Public Relations  
14401 Milverton Rd.  
Cleveland 20, Ohio

## Chapter Activities

### SOUTHERN CALIFORNIA CHAPTER PROGRAM MEETING OF AUG. 5, 1954

One of the most interesting open meetings of the season was held in the Women's Gymnasium at UCLA under the co-chairmanship of Dr. Carl Haven Young and Dr. John Sellwood, members of the Physical Education staff at the university.

Dr. Young reported on his recent trip east where he discussed the education and training of corrective thera-

pists with several leaders in the rehabilitation field. Dr. Young visited Columbia Univ., Springfield College, the Univ. of Massachusetts, and the Univ. of Illinois in an attempt to develop ideas which could be incorporated into a curriculum for UCLA.

Dr. Sellwood discussed camping for the handicapped and described some of his experiences as director of Camp Paivika, sponsored by Los Angeles County and located in the San Bernardino mountains at Crestline. The camp is operated on a recreational basis and all campers are screened before individual activities are selected within the individual's tolerance. Camp Paivika offers swimming, horseback riding, and adapted sports in its program as well as traditional camping activities. Counselors must be at least 19 years of age and most are recruited from physical education or pre-therapy schools. Following his discussion, Dr. Sellwood showed a motion picture made at the camp under the auspices of the Easter Seal Foundation for Crippled Children.

### GRAND CANYON CHAPTER CITED

Pres. Mantovano has cited the Grand Canyon Chapter for its recent project in which chapter members have volunteered their off-duty services to a local hospital to offer corrective therapy to the hospital patients under the supervision of the medical staff.

The Journal depends entirely on the cooperation of chapter officials for copy for the Chapter Column. It is suggested that each chapter appoint a representative to correspond regularly with the Chapter Editor and to keep him informed of chapter news. Address all correspondence to Sam Boruchov, 147-02 77th Rd., Kew Garden Hills, N. Y.

## News and Comments

### THE REPRESENTATIVE ASSEMBLY ELECTION

Chris Kopf, Elections Chairman, reports that the six area elections necessary to complete the task of selecting delegates to the Association for Physical and Mental Rehabilitation's Representative Assembly have been completed and the results appear elsewhere in these columns.

Mr. Kopf states that approximately 60% of the active membership voted in the election and that because of the closeness of the balloting, the results might have been considerably different had more members taken part in the balloting. He suggests that a consideration for limiting service in the Assembly to two consecutive terms may stimulate interest in these elections which are carried out by mail vote.

### PRESIDENT'S COMMITTEE HOLDS FALL MEETING

The two-day Fall Meeting of the President's Committee on Employment of the Physically Handicapped was held in Washington, August 26-27 at the Washington Hotel.

The morning session on August 26 featured an address by Harvey V. Higley, Administrator of Veteran Affairs, in which he outlined the progress made during the past decade in stimulating employers to hire handicapped persons on the basis of their ability and not their disability. Panel discussions during the first day included a discussion, "Sustaining Community Interest" with several personages active in State and community committees on employment of the physically handicapped participating; a panel on "The Safety Factor in Employment of the Physically Handicapped" and another on the subject, "The Exposition and Parade of Progress—A Post Mortem." Highlights from the Washington Exposition in April were the subject of a new film, "A Story of Progress" which was premiered at this session.

On August 27, Arde Bulova, chairman of the Bulova Watch Co., addressed the assemblage on the subject, "A Pattern for American Industry," and Gov. Herter of Massachusetts discussed the employment of the disabled in his talk, "Through a Governor's Eyes." The afternoon session included a roundtable discussion by State and local committee chairmen and representatives of mutual problems involving this problem.

## IN MEMORIAM

CLINT B. RANKIN 1914-1954

Clint B. Rankin, Corrective Therapist at the Los Angeles V.A. NP Hospital, passed away on August 4 after a prolonged illness. Mr. Rankin was born in Pittsburg, Kans. and was graduated from the Kansas State Teachers College in 1937. He taught physical education in the schools of Golden City, Mo. prior to entering the U.S. Navy during World War II as a chief specialist in the navy reconditioning program. Mr. Rankin began his service as a corrective therapist at Los Angeles in 1948. He is survived by his wife, Edythe, and two sons, Clint, Jr. and Robert.

VINCENT SHERRY 1908-1954

Vincent Sherry, also a corrective therapist at the Los Angeles V.A. NP Hospital, died on August 6. Mr. Sherry was born in Chicago and attended Lakeview High School, Northwestern Univ., and received his degree at the American College of Physical Education in Chicago. He taught physical education in Chicago schools and served as a chief specialist in naval reconditioning during World War II. Mr. Sherry entered the field of corrective therapy in 1948 and was, for several years, chief of the section at the Oakland V.A. Hospital. He transferred to Los Angeles in May, 1954. Mr. Sherry is survived by his wife, Agnes.

### ONE DOCTOR FOR EVERY 730 CITIZENS

The American Medical Association has announced that there is at present one doctor for every 730 men, women, and children in the U.S. The ratio is the lowest ever achieved and is expected to go even lower during the next few years due to the acceleration in graduations from medical schools.

### NEW STUDY ON RHEUMATIC FEVER REPORTED

A research team from the New York Hospital-Cornell Medical Center has reported experimental results from its recent investigation into the causes of rheumatic fever. Drs. Aaron Kellner and Theodore Robinson, through animal experimentation, have concluded that an enzyme released following infection of the throat by streptococci kills laboratory animals and may be the cause of the disease.

### SEROTONIN PRODUCED BY NEW PROCESS

A new process whereby serotonin can be produced cheaply and in mass supply through the synthesis of a coal tar derivative was described at the recent annual meeting of the American Chemical Society in New York by Dr. Merrill E. Speeter, head of the Department of Biochemistry of the Upjohn Company, Kalamazoo, Mich. Serotonin, a chemical found in the brains of animals was suggested by Drs. Wooley and Shaw in a study earlier this year as useful in learning more about mental illness. From their study, the two doctors discovered that analogs evidently prevented the utilization of serotonin in certain animals with mental aberrations.

The new synthesis should make serotonin available for further research on animals and possible use on human patients following completion of toxicity tests. It is not suggested that it be used in the treatment of mental disease, but it is expected to prove a valuable research tool in the study of unusual mental cases.

### WORLD CONGRESS STUDIES IMPROVED ATTITUDES TOWARD THE PHYSICALLY HANDICAPPED

The improvement of public attitudes towards the physically handicapped was considered by experts from more than thirty countries who assembled Sept. 13 in The Hague, Netherlands for the Sixth World Congress of the International Society for the Welfare of Cripples.

Discussions of the latest accomplishments and techniques in providing assistance to the disabled were centered about the necessity to enable the person with a disability to utilize his abilities in the normal activities of his community without suffering the undue discrimination which results from archaic attitudes on the part of the public.

"We have made great progress in the development of medical care for persons with disabilities, as well as in the improvement of special educational and vocational facilities," said Mr. Konrad Persson, Director General of the Royal Pensions Board of Sweden and president of the international organization. "But we cannot claim to have given crippled persons opportunities which are their right until we have found ways to eliminate the artificial barriers which our traditional prejudices against the crippled have erected."

The opening meeting of the Congress was held Sept. 13 in the Concert Hall of the Kurhaus Hotel in Scheveningen, a seaside suburb of The Hague. Mr. J. G. Suurhof, the Netherlands Minister of Social Affairs and Public Health, officially opened the conference which was presided over by Dr. J. M. Ravesloot, President of the Netherlands Central Society for the Welfare of Cripples. The opening address, "A World Wide View: Improving Attitudes and Services for the Crippled," was presented by Dr. Henry H. Kessler, Past President of the International Society for the Welfare of Cripples and Medical Director of the Kessler Institute for Rehabilitation in New Jersey.

Dr. Howard A. Rusk, Director of the Institute of Physical Medicine and Rehabilitation in New York and Associate Editor of The New York Times, was the principal speaker at a major session on Sept. 15 devoted to the subject, "Dynamic Rehabilitation." Dr. Jose I. Tarafa, Director of the Roosevelt Rehabilitation Center in Havana, Cuba, presided over this session, which divided into sectional meetings to consider the rehabilitation of specific disabilities. Experts leading these meetings included Dr. Ludwig Guttmann, Director of the British National Spinal Injuries Centre; Dr. Meyer A. Perlstein, President of the American Academy for Cerebral Palsy; Dr. G. F. J. M. Bar, Medical Director of the St. Maarten's Clinic in the Netherlands; and Dr. Francis Bach, a British specialist in rheumatism and arthritis.

The organization of international programs to assist the disabled was considered on Sept. 14 under the chairmanship of Mr. Kurt Jansson, Chief of the Rehabilitation Unit in the United Nations Secretariat. Speakers were Mr. Elliott Newcomb, Secretary General of the World Veterans Federation in Paris, and Mr. Leonard W. Mayo, Director of the Association for the Aid of Crippled Children in New York.

On Sept. 15 attention was focused on the local and national organization of rehabilitation services. Mr. E. Stanley Evans, Medical Superintendent of the Lord Mayor Treloar Hospital in England, presided and speakers included Dr. Arne Bertelsen, Senior Surgeon in the Orthopedic Hospital in Copenhagen, Denmark, and Mr. Aarre Simonen, Vice President of the Finnish Association of Disabled Civilians and Servicemen.

The closing address of the Congress, "Our New Attitudes Toward the Crippled," was presented by Dr. William T. Sanger, President of the Medical College of Virginia and Past President of the National Society for Crippled Children and Adults in the United States.

Among the other leaders in rehabilitation programs appearing on the Congress program were Professor Fabian Langenskiold, President of the Board of Directors of the Invalid foundation in Finland; Dr. Carlos E. Ottolenghi,

Professor of Orthopedics at the University of Buenos Aires, Argentina; Dr. Arthur Fuchs, Chairman of the Council for Rehabilitation of the Handicapped in Austria; and Dr. A. Querido, Director of Public Health in the city of Amsterdam, Netherlands.

Other participants were Sir John Ilott, Deputy Chairman of the New Zealand Crippled Children Society; Dr. Gudmund Harlem, Director of the State Rehabilitation Center in Norway; Mr. Koo Cha Hun, Deputy Chief of the Rehabilitation Unit in the Ministry of Social Affairs of Korea; Mr. K. F. Coles, President of the Australian Advisory Council for the Physically Handicapped; and Miss Mary Switzer, Director of the Office of Vocational Rehabilitation in the United States Department of Health, Education, and Welfare.

The governing bodies of the International Society met during the week, as did its professional Committees on Spinal Paraplegia, Education of Crippled Persons, and Prostheses, Braces and Technical Aids.

World Congresses of the International Society for the Welfare of Cripples are held each third year and are the principal international meetings devoted to the rehabilitation of all types of disability. They constitute one activity in the program of the International Society which is devoted to the world-wide development of medical, social, educational and vocational services for the physically handicapped. A federation of national, non-governmental organizations conducting rehabilitation programs in twenty-six countries, the ISWC has its headquarters in New York.

The Sixth World Congress was organized under the joint auspices of the International Society and its affiliated organizations in the Netherlands, the Netherlands Central Society for the Welfare of Cripples. Planning was carried out by an Organization Committee of which Dr. C. P. H. Teenstra, Medical Director of Julianaa Oord Sanatorium for Bone and Joint Tuberculosis, is Chairman; Dr. J. S. Stratingh, Secretary of the Netherlands Society; Mr. G. R. D. Crommelin, a Director of DeTwentsche Bank in The Hague; and Mr. G. W. Pauw, Netherlands Ministry of Social Affairs and Public Health.

#### ATTITUDES TOWARD THE DISABLED DISCUSSED

Most able bodied people have a deep-rooted dislike for handicapped people which they find difficult if not impossible to overcome. This is one of a number of startling results of a study announced (SEPTEMBER 1, 1954) at a meeting of psychologists concerned with problems of rehabilitating the disabled.

The meeting was held at the Institute for the Crippled and Disabled, rehabilitation center in New York City. It was under the direction of Dr. James Garrett, Office of Vocational Rehabilitation, U.S. Department of Health, Education and Welfare.

The study, which has been under way for almost three years, is being conducted by psychologist Jack Granofsky, employment counselor to the 52 Association, a widely known agency in New York City which specializes in the problems of the handicapped. It is being done under the supervision of Yeshiva University, New York City.

The study was made among two groups of people: those who had worked as volunteers with the handicapped in places of rehabilitation for at least one year, and those whose experience with the handicapped was no more than average contact.

The persons tested were shown a series of pictures depicting handicapped and able bodied people in typical real life situations—in the home, at places of business, in recreational poses and in on-the-street casual meetings. Those tested were asked to write down what they thought was happening in each picture, how the situation came about and what they thought would happen next.

The results were then analyzed by 19 experts in the field of rehabilitation who, themselves, had been selected by test for their abilities to independently reach the same

conclusions on identical material such as that gathered in the tests.

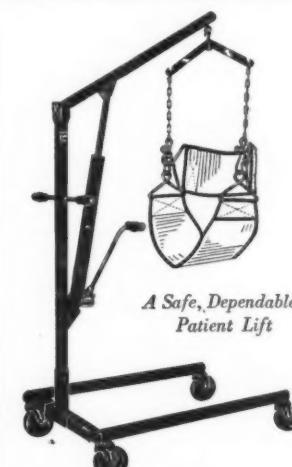
Mr. Granofsky stated that the reactions of the able bodied to the disabled ranged from such negative attitudes as absolute rejection, horror and hostility, to positive attitudes of admitting the disabled to social situations with the able bodied. Yet, he said, as a group, the overall reaction was far more negative than positive, with the greatest resentment directed toward wheelchair cases and facial disfigurement. The least negative attitudes were displayed toward arm and leg disabilities.

Mr. Granofsky said that his studies revealed little difference in reaction to arm and leg disabilities, and also little difference in attitude toward facial disfigurement as compared with wheelchair cases. The tests used were devised by Mr. Granofsky especially for use in this study.

Results of another study presented at the meeting showed that when persons suffering from aphasia, or loss of speech, receive treatment in groups by psychologists they are helped to regain their lost speech, increase their vocabularies and their powers of conversation much more readily and rapidly. "Strokes" are a typical cause of loss of speech. These findings were announced by Dr. Harold Chenven, chief clinical psychologist at the Institute for the Crippled and Disabled.

Dr. Chenven said that speech ability, or the lack of it, is one basis on which people accept or reject each other. If a person lacks normal or adequate speech ability, the effects of such condition run far deeper than the physical damage itself. By forming groups of persons suffering from speech difficulties and encouraging them to work out their problems in company with others, highly beneficial results in speech recovery and conversational development as well as vocabulary improvement have been obtained. This is due, Dr. Chenven said, to the increased opportunities for using speech provided by the warm, accepting atmosphere of groups.

**HOYER LIFTER**



A Safe, Dependable Patient Lift

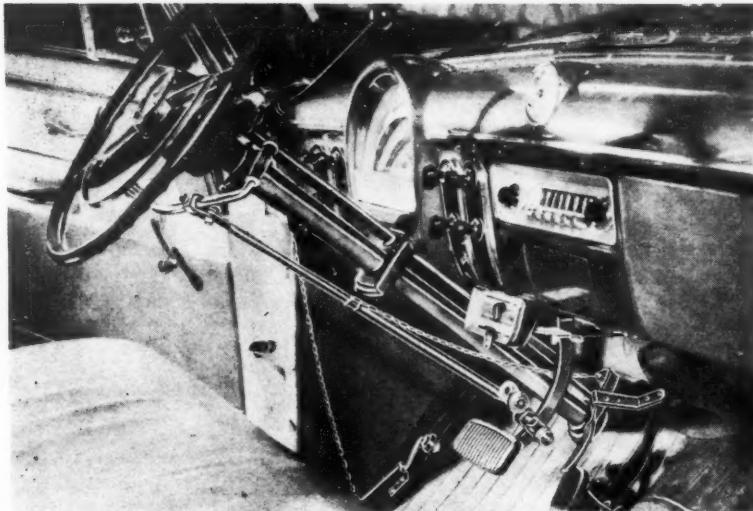
See your Everest and Jennings dealer or write to manufacturer.

**Ted Hoyer & Company**  
OSHKOSH, WISCONSIN

Ours  
Will Operate  
A Standard Shift  
With Only One Lever

All  
Arnold  
Controls Give A  
Car-Life Guarantee

## ARNOLD-HAND CONTROLS



Easily Installed by Any Mechanic by Using Pictured Instructions—Pencil-Like Lever (Pull-to-Go—Push-to-Stop) Operates Entire Car.

### Arnold DEVICES, INC.

310 East 34th Street — New York 16, N. Y.

Opp. Queens Midtown Tunnel — LExington 2-5989-6294

WHEEL CHAIRS—HOSPITAL EQUIPMENT SALES & SERVICE—AMBULANCE AND OXYGEN SERVICE  
RAvenswood 9-3398

Association for Physical  
and Mental Rehabilitation

### MEMBERSHIP APPLICATION

Mail to Charles Willhite  
4732 Canehill  
Long Beach, Calif.

Enclosed please find (check one)

\$10.00 for my Active Membership  
 \$ 5.00 for my Professional Membership  
 \$ 4.00 for my Associate Membership

Name ..... Date .....  
(Print or Type)

Home Address ..... (Street) ..... (City) ..... (State)

Signature .....

Proposed by ..... Address .....

Active  
Location .....

Position Title .....

Education ..... (College) ..... (Major) ..... (Degrees)

(Degree with major in Physical Education required)

Training and/or experience in Physical and/or Medical Rehabilitation includes:—

(One year under the direct supervision of a Medical Doctor required)

#### Professional

I received my ..... degree or certificate from ..... (cross out one) ..... (name of college, university, institution)

I am ..... (List your profession related to rehabilitation, such as physician, nurse, clinical psychologist, speech therapist, physical educator, sports technician, social worker, vocational advisor, etc.)

I have a special interest in rehabilitation because .....

#### Associate

I am employed at ..... (list your position) ..... (location)

I have a special interest in rehabilitation because .....

Thoughts of going places and doing things again often overcome "wheel chair shyness" and other inhibitions when a patient gets in a modern E & J chair.



## the chair that... Adds the will to the way



For comfort, handling ease, safety and beauty, you can recommend no finer chair than E & J.

There is a standard or custom model E & J chair for every handicap, in sizes ranging from "Tiny Tot" to rugged adult. A complete E & J catalog is yours for the asking.



**EVEREST & JENNINGS, INC.**  
1803 PONTIUS STREET, LOS ANGELES 25

# Classified Directory

Price of Directory Listing for one year—6 issues—\$10.00

## STORES WHERE EVEREST AND JENNINGS PRODUCTS MAY BE PURCHASED

BOWERS AMBULANCE SERVICE, 430 E. Pacific Coast Highway, Long Beach, California	
YALE SURGICAL CO., 1004 Grand Ave., New Haven 11, Connecticut	
V. MUELLER & CO., 320 S. Honore St., Chicago 12, Illinois	SE 3-2180
REGER RENTAL, SALES & SERVICE, Box 284, 717 N. Main, Hutchinson, Kansas	2-2375
SALINA SURGICAL APPLIANCE STORE, 116 S. 5th St., Salina, Kansas	9715
PEACOCK SURGICAL CO., INC., 1235 Texas Ave., Shreveport, Louisiana	Day 3-5276—Night 7-4910
BETH-MONT SURGICAL SUPPLY CO., 4610 East-West Highway, Bethesda 14, Maryland	Oliver 4-6633
THE COLSON-MERRIAM CO., 1623 N. Alisquith St., Baltimore, Maryland	Mulberry 2847
MEDICAL ARTS SURGICAL SUPPLY CO., 20-22-24 Sheldon Ave., S.E., Grand Rapids 2, Michigan	
C. F. ANDERSON, INC., Surgical and Hospital Equipment, 901 Marquette Ave., Minneapolis 2, Minnesota	
SEILER SURGICAL CO., INC., 111 S. 17th St., Omaha 2, Nebraska	ATlantic 5825
AMSTERDAM BROTHERS, 1060 Broad St., Newark 2, New Jersey	
BURLINGTON SURGICAL APPLIANCES, 314 High St., Burlington, New Jersey	Burlington 3-0052
COSMEVO SURGICAL SUPPLY CO., 236 River St., Hackensack, New Jersey	Diamond 3-5555
ELMIRA DRUG & CHEMICAL CO., 157 Baldwin St., Elmira, New York	6289
DOWD CHAIR RENTAL & SALES, 392 Franklin St., Buffalo, New York	Cleveland 3335
DOWD CHAIR RENTAL & SALES, 138 South Highland Ave., Pittsburgh 6, Pennsylvania	Montrose 1-3535
DOWD CHAIR RENTAL & SALES, 4848 Woodward Ave., Detroit 1, Michigan	Temple 3-3490
DOWD CHAIR RENTAL & SALES, 310 N.E. 61st St., Miami 3, Florida	89-8561
DOWD CHAIR RENTAL & SALES, (Canada) Ltd., 589 Yonge St., Toronto 5, Ontario, Canada	Princess 6644
MAYFLOWER SURGICAL SUPPLY CO., 2515 86th St., Brooklyn, New York	
JEFFREY-FELL CO., 1700 Main St., Buffalo 9, New York	Garfield 1700
MAYFLOWER SURGICAL SUPPLY CO., 212 Front St., Mineola, L. I., New York	Garden City 3-5380
FIDELITY MEDICAL SUPPLY CO., 1st & St. Clair Sts., Dayton 2, Ohio	MI 7636
GRANT G. FORSYTHE, 11 E. 6th St., Tulsa 3, Oklahoma	
E. A. WARNIK CO., Simon Long Bldg., 50-52 S. Main St., Wilkes-Barre, Pennsylvania	2-8064
HEYI PHYSICIANS SUPPLY CO., 419 State St., Erie, Pennsylvania	2-6785
THE CLAFLIN CO., 40 Mathewson St., Providence 3, Rhode Island	GA 1-5800
MARVIN F. POLARD CO., 1412 E. Broad St., Richmond, Virginia	
KLOMAN INSTRUMENT CO., INC., 1822 Eye St., N.W., Washington 6, D. C.	ME 3900
THE COLSON-MERRIAM CO., 703 Transportation Bldg., Washington 6, D. C.	National 0011
DOERFLINGER'S SURGICAL & ORTHOPEDIC APPLIANCES, 252 W. Fond du Lac Ave., Milwaukee 6, Wisconsin	Hi 2-2525

## STORES WHERE EVEREST AND JENNINGS PRODUCTS MAY BE RENTED OR PURCHASED

ABBEY RENTS, 600 S. Normandie Ave., Los Angeles 5, California	AN—1-6134; NE—8-4135; DU—4-5292; PL—2-3131
	OR—7-6178; CI—3-2101; ST—4-1174; CR—1-2103; SY—6-9293; EX—4-3232
ABBEY RENTS, 2841 S. El Camino Real, San Mateo, California	FI—5-7775
ABBEY RENTS, 1827 "J" Street, Sacramento 14, California	HU—4-9151
ABBEY RENTS, 1761 American Ave., Long Beach, California	LB—6-6264
ABBEY RENTS, 2895 El Cajon Blvd., San Diego, California	Atwater 1-8151
ABBEY RENTS, 1314 Post Street, San Francisco, California	GR—4-2525
ABBEY RENTS, 2315 Broadway, Oakland, California	HI—4-8181
ABBEY RENTS, 350 Broadway, Denver, Colorado	Pearl 3-4651
ABBEY RENTS, 310 S. Ninth St., Minneapolis 2, Minnesota	Lincoln 8931 (Mpls.) Nestor 8831
ABBEY RENTS, 4041 Broadway, Kansas City, Missouri	Jefferson 5200
ACME-ABBEY RENTS, 3230 Washington Blvd., St. Louis 3, Missouri	Olive 2-5700
ABBEY RENTS, 1000 E. Burnside, Portland, Oregon	Filmore 5001
SAM FORTAS HOUSE FURNISHING CO., INC., Main and Poplar, Memphis, Tenn.	5-3515
BEST RENTALS, 2025 S. Shepherd Drive, Houston 2, Texas	Keystone 4416
ABBEY RENTS, 1000 Pike Street, Seattle, Washington	Seneca 5040
ABBEY RENTS, 2824 W. Fond du Lac Ave., Milwaukee 10, Wisconsin	Uptown 3-2000

## MANUFACTURERS OF ORTHOPEDIC AND PROSTHETIC APPLIANCES

BIRMINGHAM ARTIFICIAL LIMB CO., 410 N. 19th St., Birmingham 3, Alabama	3-1786
ALEXANDER ORTHOPEDIC CO., INC., 301 Shipley St., Wilmington, Delaware	
UNITED LIMB AND BRACE CO., INC., 61 Hanover St., Boston 13, Massachusetts	Capitol 7-2183
JACKSON BRACE & LIMB CO., 1224 N. State St., Jackson, Mississippi	
NATIONAL LIMB INC., 3137 Farnam, Omaha, Nebraska	WE-4088
UNITED ORTHOPEDIC APPLIANCE CO., 791 Broadway, New York, New York	
W. T. HINNANT ARTIFICIAL LIMB CO., 120 E. Kingston Ave., Charlotte, North Carolina	
FIDELITY ORTHOPEDIC, 5th and Main Sts., Dayton 2, Ohio	FU 5462
W. F. LAFORSCH, ORTHOPEDIC APPLIANCES, 536 Valley St., Dayton 4, Ohio	
GEORGE S. ANDERSEN CO., 3419 Walnut St., Philadelphia 4, Pennsylvania	
SNELL'S ARTIFICIAL LIMB CO., 1916 West End Ave., Nashville 4, Tennessee	
SNELL'S ARTIFICIAL LIMB CO., Johnson City, Tennessee	

## UNCLASSIFIED

HURL-O-DART MANUFACTURING CO., "The Ideal Lawn or Beach Game," 2242 Union St., Indianapolis 2, Indiana	GA 2242
PARAVOX HEARING AIDS, Elm Creek, Nebraska	2231
THE LIEBEL-FLARSHEIM CO., Manufacturers of Apparatus for Physical Medicine, Cincinnati 15, Ohio	PO 2700
NATIONAL SPORTS EQUIPMENT CO., 360-370 N. Marquette St., Fond du Lac, Wisconsin	
FILLAUER SURGICAL SUPPLIES, 930 East Third St., Chattanooga, Tennessee	7-1161

If not delivered in 5 days  
return to  
**EDWARD F. MECHELLA**  
Box 178  
Montrose, N. Y.

State Universities of Iowa  
Libraries  
Serials Acquisitions  
Iowa City, Iowa

Sec. 34.66 P. L. & R.  
U.S. POSTAGE  
**P A I D**  
Montrose, N. Y.  
Permit No. 3

**APPARATUS FOR**  
**Corrective**  
**Therapy**



Views above and left show well-equipped rooms in the physical therapy department of Michael Reese Hospital, Chicago. Porter supplies stall bars, gym mats, chest weights and a wide variety of highly specialized corrective devices described in a catalog which is yours for the asking.

Porter Corrective Therapy Apparatus is carefully manufactured from designs based on the recommendations and experiences of authorities in the field. Many of the devices are standard equipment in Physical Medicine Rehabilitation and Corrective Gymnastic work.

A catalog containing these standard items will be mailed on request. For therapists requiring special devices, Porter's engineering department is available for

working out new designs to meet new requirements.

Backed by nearly a century of quality manufacturing, The J. E. Porter Corporation is the world's largest makers of gymnasium, playground and swimming pool equipment. The same reputation that has made Porter a famous name among schools, universities and recreation leaders is your assurance in the choice of Porter as a source for dependable Corrective Therapy Apparatus.

Send for your free copy of the Porter catalog of Physio-Therapy Apparatus, sent without obligation on request.

**THE J. E. PORTER CORPORATION**  
FACTORY AT OTTAWA, ILLINOIS

CHICAGO OFFICE: 664 N. Michigan Avenue, Chicago 11, Phone: SUperior 7-7262  
NEW YORK OFFICE: 11 West 42nd Street, New York 18, Phone: LOngacre 3-1342



